

CLUBBED

a SEAL production

CD-R Explained

Create your own music and data CDs
on your Amiga with our
simple guide.

Verbatim

Need More Space?

We guide
you through
choosing and
preparing a new
hard drive.

Issue 5, Spring 2000

Reviewed:

fxPaint
BurnIT
MakeCD
MasterISO
AmiTradeCenter
Wildfire 7 PPC
WipeOut 2097
Grand TV Amazing

Interviewed:

Bill McEwen

Tutorials:

CD Writing
VGA to PAL Project
Back to Basics: Shell
Cinema 4D

For Amigans, By Amigans, On Amigas!

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Do The Write Thing

We'd like to make Clubbed more "interactive" so we need your input!

Got a question you'd like answered or an opinion you'd like to share? Write to us and we'll include it in a letters page.

Got a tip for other readers or even an article up your sleeve? Send it in and you could very well see your name in print.

Got a suggestion or comment on the magazine? Let us know and we'll try and make Clubbed better for you.

By
Robert Williams



Only room for a very short editorial this issue, and now some more good news:

Suffice to say that the news from the St. Louis show is very interesting, with Bill McEwan's talk to the user group representatives being particularly relevant to current Amiga users. If Amiga do all the things he mentions there (including supporting user groups and PPC hardware companies), they will be a long way to winning the support of this Amigan and I'm sure many others.

I hope you'll enjoy the increase in tutorial content for this issue, special thanks

must go to Bob Tiffen for his extensive Cinema4D tutorial.

Finally, if you're on the 'net and want to keep up to date with our progress on Clubbed please join our clubbed-announce mailing list, information inside the back cover.

Enjoy the mag and I look forward to meeting some subscribers at the Kickstart Show in May.

Chairman

By
Mick Sutton



This quarter I would like to talk about Amiga hardware and software dealers, as the subject of value for money and service quality seems to be a point of interest to our club members, at most of our meetings. People are always approaching me and asking why things cost so much money, when it has anything to do with the Amiga.

Well, I am not here to defend the "Amiga" dealers nor am I here as a spokesperson for all Amiga users, but I can see that there are two sides to every coin, and I shall try and make sense of it from both perspectives.

A typical member of SEAL will ask me the following questions.

1. Why do "Amiga dealers" sell accelerator cards for the price they do when PC dealers sell whole PC systems for less?
2. Why are graphics cards for the Amiga so expensive when the latest turbo nutter bastard super duper 3D card for the PC cost so little?
3. Why do motherboard add-ons (clock header devices, scan doublers, IDE buffered interfaces etc..) cost so much?
4. Why are generic devices such as CD-ROM's, hard drives, CDRW's, Zip drives & digital cameras so expensive when bought from "Amiga" dealers compared to PC dealers?
5. Why does software on the Amiga cost so much, all my PC friends hardly pay anything?
6. Why when I have sent something back, do the dealers argue with me that

the item is not faulty when I know it is?

Ok then lets try and answer them in order, the first, second and third questions all have a pretty similar answer. Nearly all Amiga hardware devices are not mass produced generic items, by that I mean you won't find them inside a PC anywhere and therefore it has had to be designed, developed and tested by someone (not for free) and a machine has to be specifically tooled up for quite a limited production run. Also the individual components on the device are usually not industry standard and therefore are higher cost to purchase in the first place. That combined with the fact that only low numbers of units will be sold (probably only thousands at best) the final cost of any boards will be quite high, it cannot be avoided (look what happened to Phase5), I'm afraid we are stuck with it unless the Amiga has a sudden rise in popularity.

Question 4 is interesting because I can see no reason why any of the items listed should cost any more than at other dealers, maybe they are trying to bump up their profits to subsidise the low profits on other items, or maybe they think that they have us at their mercy, as some people think that they are the only dealers to sell "Amiga compatible" hardware, but if that is the case it just isn't on is it? Most of these dealers sell stuff for PC's as well, so they are not relying on the Amiga exclusively for their

income so knock it off guys! If you want to purchase such items as hard drives etc, then just shop around and get a good deal, but I would recommend that you join your local Amiga user group so that they can advise you on compatibility issues should they arise.

Question 6 are you sure? The software that comes out on the Amiga I believe is very well priced considering how many copies of the application or game that they are likely to sell, most people that I know who have PC's haven't paid a single penny for 95% of the software that is sitting on their hard drives and why you ask, well the bottom line is that piracy is so rife on the PC it is out of control, no sooner than a game or application is released then it is copied and distributed! But unlike the Amiga even though the colossal amount of piracy going on, it will not cause the failure of the platform single handed due to the fact that nearly every business out there has PC's with legitimate software on it and that means large volumes of software is still being sold.

Question 6 is an awkward one to answer as there are two sides to the coin here, if you buy an item and try it in your Amiga and it doesn't work then send it back with the statement "oh it doesn't work I want my money back" one of two things can happen, 1 the dealer checks the item finds it faulty and agrees to refund your money or send another, or 2 the item is checked by the dealer who discovers that there is nothing wrong with it!

The fact is many items that are returned to dealers are themselves working fine but when combined with a certain configuration of say motherboard or other devices then it will not work correctly (Apollo accelerators are one thing that comes to mind). Also quite a few workbench "hacks" tend to create problems by doing things in an OS unfriendly way (get OS 3.5 to get your system up to a decent running environment) and can cause conflicts. What I suggest is that if you can try the "Faulty" item in another Amiga with for example a different revision of motherboard or in the case of an accelerator a few different memory SIMMS. If you cant do the above because you don't know anyone else with an Amiga, then the best thing for you to do is join an Amiga user group, there is one that springs to mind...!



Update

Web Site

The SEAL website has recently been moved onto a new server. If you use SEAL's new address: <http://www.seal-amiga.co.uk/> the change will not effect you. However if you use one of our older addresses you may get either a redirection page or a "Not Found" error so please check your hotlist is up to date.

Email Addresses

SEAL is now able to provide its members with a username@seal-amiga.co.uk EMail address, you can choose any username you like and EMail sent to that address will be automatically forwarded to your real EMail address. Please ask Gary Storm for more details of this service.

Several SEAL addresses have already changed to the new domain, the most important changes to remember are the club address (for general club information) which is now seal@seal-amiga.co.uk and the magazine address which is clubbed@seal-amiga.co.uk.

AGM

SEAL held its Annual General Meeting in February, we had an excellent turn out with about 25 of our 30 plus members present.

The meeting started with Mick Sutton giving a summary of SEAL's finances and Robert Williams outlining Clubbed's finances and progress. Committee elections were then held. Mick Sutton, Robert Williams, Gary Storm and Jeff Martin were re-elected to their positions of Chairman and treasurer, Vice Chairman and magazine editor, Promotions Officer and Committee Member respectively. Sadly committee member Martin Miller has left SEAL, however we were pleased to welcome Roy Burton who was elected to fill the vacant position.

We also agreed that committee only meetings would be held several times a year to allow committee members to plan ahead.

The rest of the AGM was spent discussing the future of SEAL, some of the activities suggested for the future were:

- Fund raisers (raffles etc.)
- SEAL Sale
- Tutorial videos (hardware and software) Demos and Tutorials
- Amiga celebrity guests
- Inter-usergroup activities
- Beginners Workshops
- Social Activities

Meetings

Since the AGM, we have been making an effort to have an activity, such as a tutorial or demonstration at every other meeting. These have included demonstrations of fxPaint and Photogenics 4 and a round-up of three useful utilities. The utilities round-up was particularly interesting as several members had their own suggestions of programs they couldn't live without. Hopefully they will feel inspired to demonstrate their choices in the future. Another feature that was suggested at the AGM was beginner's tutorials, in fact the committee was already planning to start these. To help with these tutorials SEAL has purchased an A1200, Blizzard 1230 accelerator and 8833MkII monitor so a basic system will always be available at meetings.

SEAL Sale

We are planning to hold an Amiga event in the next few months, currently we are working towards an early September date. The sale will take place on a Sunday at SEAL's meeting venue: Northlands Park Community Centre, Basildon. We will be hiring the whole building for the day, this should give plenty of room for exhibitors and activities. Amiga dealers and other user groups will be invited to exhibit and we plan to have activities such as games competitions, software and hardware demonstrations and much more, so there will be plenty to see and do. By the next issue of Clubbed (planned for early August) we will have full details, in the mean time announcements will be posted on the SEAL website.

Clubbed.info

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(19:00 - 22:00 GMT only please).

Only Amiga Made it Possible

Clubbed is designed and laid out using:

Hardware:

Amiga 3000

CyberStorm PPC/060

CyberVision PPC

64Mb RAM, about 8Gb HDD space.

Software:

PageStream 3 by Softlogik

ImageFX 4 by Nova Design

Photogenics 4 by Paul Nolan

Final Writer by Softwood

There are also some essential utilities we couldn't live without: Directory Opus, Magellan II, MCP, Turbo Print 7, MakeCD.

Our thanks to the creators of this and all the other great Amiga software out there.

Clubbed is entirely created on the Amiga, no other machines are used at any stage of the design or layout process.

Legalese

The views expressed in this magazine are those of the author of each piece, they do not necessarily reflect the views of the editor, other contributors or SEAL.

Please Note: Clubbed is produced by SEAL members in their spare time, while we will always strive to produce the magazine on time and include all the advertised contents this is not always possible due to other commitments. The price you pay for Clubbed covers our costs and nothing more, we don't make a profit from it.

If you wish to contact a contributor please send your message to one of the addresses above and we will pass it on.

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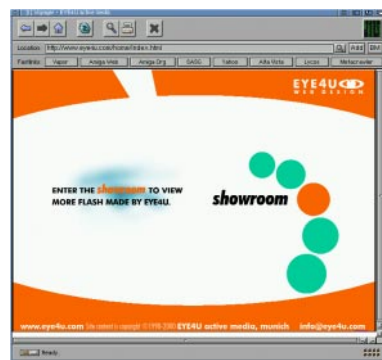
Vaporware News

Vapor have been busy enhancing their suite of Internet software yet again, improvements include:

Voyager 3.2

Voyager is going from strength to strength with support for FONT FACE, HTTP file uploads (useful for web-based EMail services etc.) and FBlit support to speed up image display on AGA machines all added since the Christmas release of Voyager 3. The program has also had many improvements and bug fixes to existing features in that time, including better SSL support, fixed TurboPrint printing and improved PNG support. However the jewels in Voyager's crown are its plug-ins, so far two have been released, a Shockwave Flash renderer and a PDF viewer.

The Flash plug-in is particularly impressive as it allows Amiga users to experience Flash enhanced websites for the first time. Flash is an interactive animation format developed by Macromedia, it allows web designers to create much more complex interactive websites. Because it uses a largely vector format a very complex presentation can be stored in a reasonably small



file. Although Voyager's plug-in doesn't support the very latest version it does work extremely well and takes advantage of PPC (PowerUP) if it is present.

Metal Web 4

After a number of public betas the final version of Vapor's visual web design package has been released. Metal Web offers full visual page creation including tables and frames. It also includes the ability to view and edit the created

HTML source within the program and to test pages in an external browser.

AmIRC 3.4

Widely considered the best Amiga IRC client and by some the best on any Platform AmIRC is still being regularly updated. Version 3.4 offers a new tabbed window mode to keep control of multiple IRC sessions without too many windows.

Most of Vaporware's software is included in the Netconnect 3 package which is now distributed by Eyetech at £49.95, we have a full review of the latest version lined up for issue 6. Individual programs can be registered at <http://www.vapor.com/> which has secure on-line ordering facilities.

KickStart Show 2000

Kickstart, the Surrey based Amiga user group, are holding their latest Amiga show on Saturday the 27th of May at Brook Hall, Brox Road, Ottershaw, Surrey. This will be their third show and if the previous ones are anything to go by it should be a great day out.

Forematt Home Computing, Epic and Ramjam Consultants will be at the show selling their Amiga goods. Several Amiga user groups including ASA from Portsmouth and of course SEAL will be there hoping to meet new members. A wide variety of new and used Amiga hardware and software will also be on sale.

The ever popular games competitions will be run again, this year contestants will be able to battle each other head to head in Quake and race with Super

Skidmarks. As if that wasn't enough prizes including 3.1Gb hard drives and Clickboom's new game Nightlong will be up for grabs.

A number of demonstrations will be going on during the show including: Amiga OS 3.5, Lightwave, Amiga on the Internet, PowerPC games and software, and Amiga for Beginners.

Amiga Inc., who along with Analogic are sponsoring the show, have donated two A1200 Magic packs as prizes. One of the A1200s will be given away as a door prize, so you just have to come along to the show to have a chance of winning!

Doors open at 12:00 and entry costs £1, more information can be found on the Kickstart website at:

<http://www.kickstart-amiga.co.uk>

MorphOS



AmigaOS running on PPC in 2000?

A group of well known Amiga programmers including Ralph Schmidt (who wrote the software for Phase 5's PowerUP boards) and Frank Mariak (the chief author of CyberGraphX) have announced they are working on a new operating system which is designed to allow the existing AmigaOS to be gradually ported to PPC while retaining much backwards compatibility. The new OS is called MorphOS.

Currently MorphOS runs on the existing Phase 5 PowerUP 68K/PPC accelerators but the 68k CPU is not used at all. AmigaOS is run on a 68k emulation developed by Ralph Schmidt and various modules (programs, libraries, device drivers) can then be ported to PPC, as more modules are ported performance should increase and we move towards a 100% PPC Amiga OS. In a recent press release the MorphOS team state that most system friendly 68k programs should run as will existing PowerUP PPC software and of course any new PPC programs.

Already some major parts of the AmigaOS have been ported to PPC, here are a few that were mentioned:

- Exec, the core of the Amiga's multi-tasking OS.
- Native SCSI drivers for the CyberStorm and Blizzard PPC SCSI controllers.
- The utility and math .libraries.
- CyberGraphX 5 - a new PPC native version especially for MorphOS.
- Ramdisk Handler - giving a new

highspeed (40Mb/s) Ram Disk.

- CD-ROM File System.
Picture, GIF, ILBM, PBM, and PCX datatypes.
- Plus the many PowerUP that applications already run, usually with an increase in speed.

MorphOS has already gained some support with some developers who plan to port applications including:

- PPC native Magic User Interface (this should speed up all MUI programs running on MorphOS).
- Vaporware are interested in porting their portfolio of Internet applications including Genesis which will give MorphOS a TCP/IP stack.
- Titan will support MorphOS with BurnIT, Elastic Dreams, Fantastic Dreams and Candy Factory.

MorphOS is designed to be portable and the authors have already commented favourably on the possibility of porting it to Amigoe and other PPC platforms. A port to other processors is also not out of the question.

According to the press release an alpha version has been released to selected developers and a public beta should be available in the coming months. MorphOS will be a commercial product when it is finally released.

MorphOS has a website where you can read the complete press release at <http://www.morphos.de/>

Amiga Users Unite!

SEAL member Richard Lambert has just launched a brand new Amiga website with a variety of information to support on-line Amiga users. He has included sections on the latest news, Amiga user groups, recent Aminet uploads (including a mirror of the last months in case the main Aminet site is down), IRC

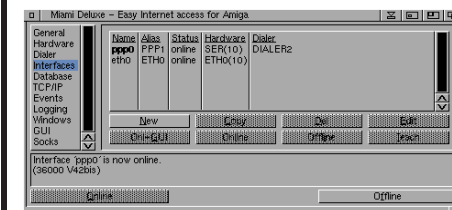
channels and a gallery. There is also an extensive links page.

The site is called United Amiga Users and looks like it will develop into a very useful resource, so why not pay Richard a visit?

<http://www.unitedamigausers.com/>

Miami Deluxe Released

Holger Kruse has released the full version of Miami Deluxe, the more fully featured version of his widely acclaimed Miami TCP/IP stack. The Deluxe version mainly adds support for more complex networks, it allows multiple interfaces so for example, your Amiga can be connected to the Internet and an Ethernet network at the same time. Built-in NAT (Network Address Translation) allows all the machines on a network to seamlessly access the Internet through one connection and a firewall ensures security.



Miami Deluxe continues Miami's tradition of being easy to setup and uses the MiamiInit configuration tool. Version 1.0 comes with extensive Amiga Guide documentation including tutorials on setting up common configurations. Miami Deluxe has been in Beta test for over a year so I think it is safe to say it is pretty bug free.

Miami Deluxe costs 60USD (about 38UKP), a secure on-line registration program is included in the archive, it can be downloaded from: <http://www.nordicglobal.com/>

Cloanto Give-away

Cloanto have released the latest versions of Personal Paint, their popular palette based paint package, and Personal Fonts Maker, a bitmap and colour font editor, free for personal non-profit use. Distribution is via Aminet or on the Meeting Pearls CDs only. The packages are the full commercial versions complete with extensive Amiga guide documentation.

Cloanto's website is at: <http://www.cloanto.com>

You can find the free downloads on any Aminet mirror such as: <http://uk.aminet.net/~aminet>

Elbox Demo ZIV Card

Elbox, the Polish firm who produce the Power Tower and a wide range of other Amiga accessories, have demonstrated a version of their FastATA (IDE) controller for the ZIV slots on Apollo's new ZIV A1200 bus board. This is the first expansion for these special faster slots. The FastATA controller (which is already available for A1200s without a bus board and in a Zorro III version) allows Amiga users to take better advantage of the many fast, cheap large capacity IDE drives which are now available and are severely restricted by the A1200 and 4000's built-in IDE controller.

Power Computing sells the Elbox FastATA products in the UK as the PowerFlyer range, they can be found at:

<http://www.powerc.com/>
or phone (01234) 851500.

IBrowse 2.2 Out Now

A new version of IBrowse correcting many of the problems described in our review last issue has been released. IBrowse 2.2 is much more stable than 2.1 and has improved (although still far from perfect) Javascript support. The improved cache browser, browser tabs, and sheer speed of version 2 can now be exploited without fear of crashing, it really is a joy to use. Unfortunately some features are still unimplemented including graphical printing (although Postscript printing still works well) and SSL support except via Miami SSL (a new version of AmiSSL is required). Some features which have been implemented are configurable pop-up menus and buttons, drag-n-drop GUI (you can now move the navigation and fast link buttons etc. around the window), FONT FACE support and HTTP and FTP resume so you can complete failed downloads. Version 2.2 is a free upgrade for IBrowse 2.x owners.

Altogether if we were reviewing IBrowse 2.2 now it would get a "Tasty", but it's still quite a way from the elusive "Caviar" rating!

HiSoft are at <http://www.hisoft.co.uk>, phone (0500) 223660. IBrowse 2.2 costs £34.95, upgrades from V.1.2 are £12.95.

Phase 5 Insolvency

Amiga hardware mainstay Phase 5 Digital Products went into receivership in January. No direct reason was given for the move but we can only assume that the delays in producing the G4 based PPC accelerators was one of the problems that caused them to run out of money. Fortunately Phase 5 had already signed contracts with DCE to license all their existing products, including the current PowerUP PPC cards and B/CVision PPC graphics cards. DCE have committed to continuing their production (see right). On a less happy note there has been no news of the fate of those Phase 5 users who either had a card in for repair or had paid for a pre-order on a G4 card. They were told to take up their case with the official receiver but so far we haven't heard of anyone being successful (although it may just take a long time of course).

Just as we go to press www.amiga-news.de has reported that the "Case of Filing for Insolvency abandoned due to lack of assets" this means that potential claims have to go to the former owners:

Wolf Dietrich and Gerald Karda, Phase5 digital products, In der Aue 27, D-61140 Oberursel, Germany.

R.I.P. AF

As you will probably have heard by now the May 2000 issue was the last Amiga Format, sadly Future publishing felt the magazine was no longer profitable and closed it down.

This is very sad news especially as AF has been so long running and was still pretty widely available, to some people without Internet access AF is probably the only clue they have that the Amiga market is still alive. On a happier note Ben Vost and Richard Drummond, AF's editor and staff writer are both moving on to new posts within Future as deputy editor on 3D World and staff writer on Linux format respectively.

It is unfortunate that Amiga Format was forced to close just at a time when things seem to be happening again in the Amiga market both from Amiga Inc.

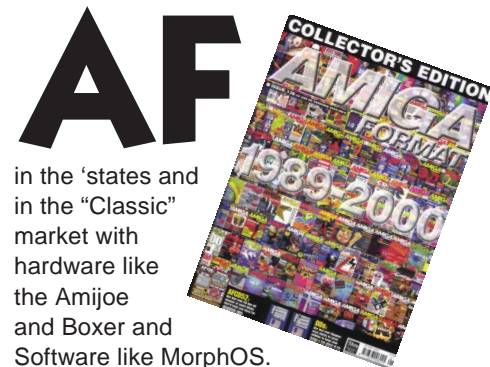
DCE Pick Up Pieces

As we reported in Clubbed issue 3 DCE had already taken over the majority of Phase 5's product lines at the time of their bankruptcy, fortunately as the contracts were already signed they have not been affected and DCE are continuing to produce most of Phase 5's 68k portfolio and are beginning production of the PPC products. This means we should see CyberStorm and Blizzard PPC accelerators and the B/CVision and C/Vision PPC graphics cards available again soon.

DCE are also producing a new version of the CyberVision 64/3D Zorro II/III graphics card which will take advantage of the double speed Zorro II (not the new ZIV) slots on Apollo's ZIV bus board. Another piece of good news is that DCE are providing a repair service for all the Phase 5 products they now manufacture so existing Phase 5 owners aren't left completely out in the cold.

DCE have a website at:
<http://www.deccom.de/>

Their UK distributor is Power Computing:
<http://www.powerc.com/>
(01234) 851500



in the 'states and in the "Classic" market with hardware like the Amijoe and Boxer and Software like MorphOS. Ben Vost has stated however that he understands Future's decision on a business level and is sure that Future will bring out a new Amiga magazine if the market does revive.

AF's untimely demise means that it is all the more important that we support Amiga Active, which is a truly excellent magazine with great and varied content.

Our thanks to all AF's staff for their hard work and especially for supporting Amiga user groups.

Innovative Release New Products



Innovative, the German developer behind fxPaint (reviewed this issue), has been busy over the last few months with a couple of new releases.

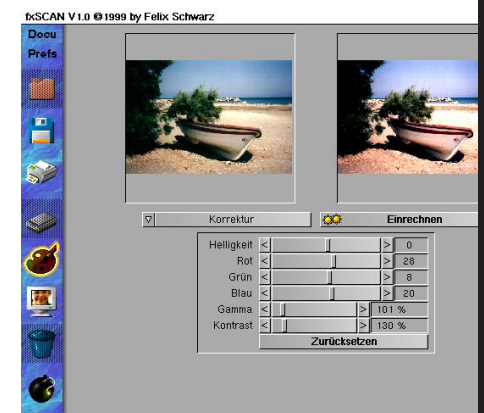
Probably the most interesting is **VHISudio 5**, this is an image capture program that supports a variety of video digitisers and digital cameras. VHISudio was previously called VLab (which is why we haven't seen versions 1 to 4) and supported only the VLab range of Zorro digitisers from MacroSystem. VHISudio uses the new VHI driver system (developed by Innovative) to support a wider range of digitisers. VHI drivers for a range of Digital cameras from Olympus and Kodak have been released at the same time as VHISudio although these do cost extra.

A thumbnail system is provided to display all the images which have been grabbed or are in the memory of a digital camera. Once an image has been selected several basic image processing effects can be performed along with the usual rotate and flip operations. The image can then be saved in a variety of formats or transferred to a dedicated image processor for further editing.

VHISudio can grab pictures with a time delay so you can create time lapse sequences. There is even the facility to automatically upload an image to an FTP site on the Internet so you can use your video camera (with a frame grabber) or digital camera as a web cam. If you grab a sequence of frames VHISudio can save them as an MPEG or IFF animation.

A demo version of VHISudio is available from the Innovative website. VHISudio is priced at 69DM (about 25UKP) with the digital camera drivers costing an additional 20DM (about 8UKP) each.

Innovative's other new release has been **fxScan**, this package interfaces to a variety of scanners using ScanQuix. It provides a straightforward user interface with image processing options geared towards correcting the colour balance of scans. fxScan also supports Wolf Faust's ICS automatic colour correction system. I understand that fxScan is included with the new version 5 of ScanQuix as an alternative to the more technical standard scanning application.



Finally a demo version of fxPaint is now available on the Innovative website for anyone interested in the features of the program or how well it will perform on their machine.

Innovative's website is at <http://www.innovative-web.de/> and has secure on-line ordering.

fxPaint is available from Blittersoft (<http://www.blittersoft.com/>, (01908) 225454) and a few other dealers in the UK so I wouldn't be surprised if they can get the other products for you too. ScanQuix is available from Eyetech.

New Birdie

A brand new version of this neat little utility which allows you to put textures in your window borders has been released. Enhancements with the new version christened "Birdie2000" include the ability to use colour gradients instead of bitmap images for the window texture as demonstrated here.

Birdie is freeware available from: <http://www.vgr.com/birdie1/>

PageStream 4

The new version of Softlogik's Amiga DTP package, PageStream is now available.

Version 4 adds even more features to PageStream's already impressive arsenal, here are some of the major additions since version 3.3:

- Indexing.
- Table of Contents generation.
- Figure numbering.
- Signature printing (automatic pagination for bound document, like this magazine).
- Defined style tags and variables at chapter level.
- Bookmarks.
- Definable kerning pairs and tracking tables.
- Automatic before and after paragraph rules.
- Drag-n-drop text editing.
- Spell check.
- PDF and HTML export.
- Configurable FPO (low resolution image preview) size.
- Margins.
- Gutter-out guides.

PageStream 4 is available from Blittersoft in the UK, the full version is £95. An upgrade from version 3.3 is available at £59.95. www.blittersoft.com/ (01908) 225454.

Softlogik's homepage has extensive information on the new version: <http://www.softlogik.com/>

OS3.5 Mailing List

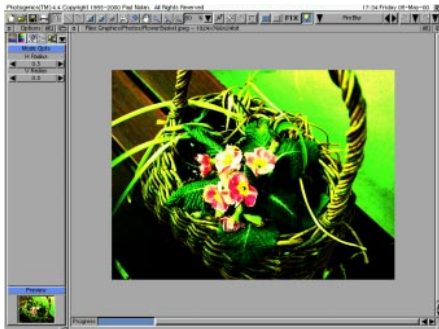
Anyone who has upgraded to the new AmigaOS 3.5 will be interested to hear that there is now an Internet mailing list devoted to discussion of the new OS. The list now has a regularly posted FAQ (frequently asked questions) file and a number of knowledgeable contributors who can help you out with problems, including some members of the OS3.5 development team. To join the list visit its home page at:

http://www.onelist.com/community/amigaos3_5/

Photogenics 4.4

Paul Nolan has released a new beta version of Photogenics, his image processor reviewed in issue 4. Version 4.4, which in our experience is extremely stable, belying its beta status, also adds new features and resolves some of the niggles we had with 4.2 in our review. A progress bar in each image window allows you to see the progress of the current effect eliminating that "has it hung?" feeling on slow effects. There is also a small thumbnail preview of the chosen effect so you don't have to wait for the whole image to render to get an idea of the effect. Many other minor improvements and some new effects including Fire Blur, Rub Emboss and Bump Map are included in version 4.4 making it a very worthwhile update, and it's free to all Photogenics 4 owners.

Paul is also working on a version of Photogenics 4 for Linux (a free Unix-like operating system) however he has stated that both versions will progress in



Note the new preview and progress bar at the bottom left hand corner of this screen shot.

parallel using the same core code so in fact if Photogenics is successful on Linux it could boost the Amiga version to new heights.

For further information and to download the latest beta visit the Photogenics website at <http://www.paulnolan.com/>. Photogenics 4 is available in the UK from Hisoft (0500) 223660 and other dealers priced at about £60.

This Surf is Dead

...it is an X-Surf, it has ceased to be:)

Individual Computers, the prolific manufacturers of products like the Buddha, Catweasel and SilverSurfer have released a new Ethernet card for Amigas with Zorro II slots. The X-Surf (pronounced Cross Surf really) has 10BaseT (UTP) and 10Base2 (BNC) Ethernet connections allowing it to be connected to most Ethernet networks and network devices like cable modems at a theoretical maximum speed of 10Mbps (about 1Mb) per second. In addition to its Ethernet functionality the X-Surf also has a pair of PIO mode 2 IDE ports, two A1200 style clock ports and an expansion connector. The IDE ports cannot currently be used until a

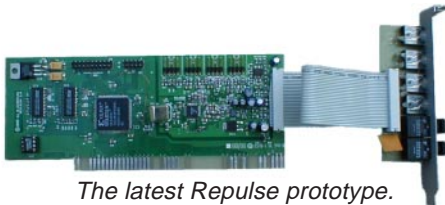
new version of IDE-Fix (reportedly called IDEFix 2000 or IDEMax) is released. The clock ports can already be used with Individual's clock port devices and their GoldSurfer (2 x Serial and 1 x Parallel) card can be connected to the expansion port.

The X-Surf is available in the UK from Eyetech (who have renamed it the Surf-XS for some reason) who supply it with a CD which helps you setup a mixed PC and Amiga network with file transfer via Samba.

Individual computers have a website at <http://www.jschoenfeld.com/>. Eyetech are at <http://www.eyetech.co.uk/>, phone

Sounds Repulsive?

Alien Design have released the latest specifications of their Repulse sound card for Zorro equipped Amigas. The board features a number of I/O connectors including optical digital input and output (S/P-DIF), external stereo line in, mono microphone in, stereo line out and stereo headphone out. There are also three internal stereo connections for input from CD-ROMs and the like. An on board mixer allows all the inputs (except S/P-DIF) to be mixed and it's also possible to record from them all simultaneously, full duplex (recording and playing at the same time) is also supported. A 64Kb FIFO buffer minimises the card's CPU load while playing and recording. The Repulse does not include a hardware MP3 decoder however it does have a feature connector which would allow one to be added if there is sufficient demand.



The latest Repulse prototype.

The mixer and independent volume controls for each input and output are adjusted via a mixer preferences program. An AHI driver and a Toccata compatible driver will be supplied allowing the Repulse to be used with all major Amiga audio software and other programs such as games and MP3 players which support audio via AHI.

A prototype is already being tested and production cards are expected in the summer. The price is likely to be about 200Euros (roughly £120). For more information take a look at the Repulse website:

<http://www.aliendesign.net/repulse/>

ParaGlide on Final Approach

The long awaited 3D acceleration add on for Village Tronic's Picasso IV graphics card will be available very soon according to Blittersoft, the UK distributor. The Paraglide module is based on a 3DFX Voodoo I chip and has 8Mb of dedicated RAM on board. Two software drivers are promised, one using

3DFX's own Glide API and the other supporting Haage and Partner's Warp3D which already works with Phase 5's 3D accelerated graphics cards. The Warp3D driver should mean that Picasso IV owners with PPC accelerators can now sample the 3D accelerated games just coming to market.

The Paraglide requires a Picasso IV fitted to a Zorro III Amiga (NOTE it will not work in a Zorro II machine like an A2000). It costs £99.95 from Blittersoft:

<http://www.blittersoft.com>
(01908) 225454.

Image Engineer On CD

Marko Seppänen, the new maintainer of Image Engineer, a flexible shareware image processor, is about to release the first ever CD edition, in fact it should be available around the time you read this. Image Engineer has a wide variety of effects and supports a wide range of load and save formats thanks to the superview.library. However one of its key features is a powerful AREXX interface which Marko has used to good effect to create a selection of scripts and plug-ins under the Visual Engineering banner. There are about 15 scripts and plug-ins in total and many are really impressive, for example Visual Logo helps you make stunning text effects and Visual Puzzle cuts your image into realistic looking jigsaw puzzle pieces.



The new CD includes the latest version of Image Engineer and all the Visual Engineering scripts and plug-ins (some of which were shareware) for just 50US Dollars (about £31). You can order the CD on-line at:

<http://www.amigaworld.com/support/imageengineer/>

FORE-MATT News

Our good friends at FORE-MATT Home Computing have been busy expanding their already wide range of Amiga software. They have taken over the Virus Free PD library in addition to the PD library they already run. On the Games front FORE-MATT is now the distributor for all of Islona's disk based games and for Vulcan's mini-series disk based games.

To get an idea of the wide range of software they stock take a look at the advert later in this issue or contact FOREMATT Home Computing on (01793) 853802, or Email sales@forematt.idps.co.uk.

Hyperion Prepare to Amaze

Hyperion have signed agreements to port several more popular PC games to the Amiga in addition to Shogo and Heretic II which they are currently working on. The new games are:

Sin

This 3D action game, set in 2037, places you as the owner of an elite private police force who's task is to foil a deadly drug trafficker. Sin is set to offer a stronger story line than many 3D shoot-em-ups with puzzles to solve and levels and characters which change depending on the decisions you make earlier in the game. Like Heretic II Sin uses the Quake II engine so this port has been greatly boosted by Heretic II's completion.

Worms: Armageddon

The sequel to Team17's hugely popular Amiga classics.

Descent: Freespace - The Great War

A space based combat simulation where you take part in a variety of missions including seek-and-destroy, espionage and epic battles. You fight on the side of the Terrans and Vasudans to help defeat the more technically advanced enemy, the Shivans. This technical mismatch adds depth to the game play as you have to steal some of the Shivan's technology to effectively fight them.

Hyperion have been posting regular updates on their progress with the ports. Sin, Shogo and Heretic II all seem to be progressing well and the other games are now entering development. Heretic II is very near release, you will probably have seen the reviews in Amiga Format and Amiga Active. A demo of Heretic II has just been released and is available from the Hyperion website (<http://www.hyperion-software.com>) however at 42Mb it might be a bit big for most people to download. SEAL members can get a copy on CD-R from



Shogo



Freespace - The Great War



Sin

Mick Sutton (for the cost of the disc) and I am sure Amiga Active will have it on their next CD.

Hyperion have hinted that at least three more ports are to be announced soon. Their porting of the commonly used Quake II (for Heretic II and Sin) and Littech (for Shogo) game engines will open the way for quicker ports of games based on these engines in the future.

Heretic II (and I expect all of Hyperion's forthcoming releases) require a PPC accelerator and ideally a graphics card with 3D acceleration. If it is released in time we will have a review of Heretic II in the next issue of Clubbed.

Hungry for News? Try these great sites!

Czech Amiga News - <http://www.realdreams.cz/amiga>
Amiga.org - <http://www.amiga.org>
Amiga News - <http://www.amiganews.de/indexe.html>
Amiga Network News - <http://www.ann.lu>

Amiga Inc. Update

By
Gary Storm and
Robert Williams

What a difference a few months make!

Since last we spoke, the new Amiga owners (Bill McEwen and Fleecy Moss) have forged ahead with developing a new kick-ass operating system (based on Tao's "Elate") for desktop computers, digital set-top-boxes, mobile phones... practically anything really. Want an Amiga Microwave? No problem :).

Putting their hardware where their mouths are, Amiga even unveiled the specs of the developer system at the Amiga 2k show in St. Louis on the first of April. Woo-Hoo! Basically this involves a 500mhz AMD CPU, a hot-stuff NVidia graphic card, sound card and various pc bits - all for about £500 (and yes, anyone can buy this from Amiga). Developers will run Elate hosted on Red Hat Linux (which will also apparently be available sometime for use on PPC cards). This system is the best cost/performance ratio needed for developing the next Amiga os and applications, which of course isn't limited to any particular hardware or operating system.

Everyone seems to be impressed at Amiga producing some goods within four months of re-birth. The plan now is for developers and Amiga to do their thing in preparation for an (unofficially) estimated release of the consumer versions in the fourth quarter 2000. With the world needing a small, modular, scalable and efficient OS for the next generation of STB's, mobile phones and handhelds Amiga and a couple of other OS providers (including QNX) could be ideally placed. Amiga's OS has a clear advantage in the fact that it is a write-once, run-anywhere RTOS (thanks to

Elate). What this means is that the Amiga OS can be put on top of Windows (for instance) and offer some performance boosts and unique features. Running clean as the sole OS of course will mean the fastest speeds possible. You could almost call this the 'Stealth OS', as it infiltrates the market initially predominant as a bolt-on to Windows, Appple, and Linux. If users like the feel of AmigaOS better than the host OS, they'll change completely to run AmigaOS natively as soon as it can offer as many essential apps that they need, or at least the ability to use existing file formats from other platform programs (eg Word for Windows).

Amiga are boasting partners such as Sun Microsystems (creators of Java), Corel (huge PC application software company), and Red Hat Linux, along with 100s of software titles available at launch, most from Amiga sources. Depending on the quality and arena of the titles of course, this amount (or more) available at launch is a significant boost to Amiga's chances.

Presumably Sony have more than a passing interest considering their involvement as Tao investors, and it's not entirely impossible that they are hedging their bets with Palm OS and AmigaOS, choosing the best one that fits the range of hardware they have coming out in the near future. Pure conjecture of course.

Amiga have and are proving themselves to be what they said they were - the saviours of Amiga. The Future has never looked so good.

Gary Storm

Amiga World

Amiga have released the first edition of their new publication, Amiga World. The magazine is currently available on the Amiga website in HTML and PDF format. PDF can be downloaded and printed (using a free tool like APDF on the Amiga or Acrobat for Mac and PC).



The first issues includes several articles on Amiga's vision for the future, "Tearing Down the Walls" and "Beyond the Beige Box" discuss the new future Amiga in partnership with Tao sees for computing. There is a report from the recent St. Louis show where the new Developer platform was launched which ties in with an article describing Amiga's new developer program. "Entering the Amiverse" (a term we seem sure to hear a lot more of) and "Inside the New Amiga" give an overview of the concepts and components that will form the basis of the new Amiga system.

In a nice touch to support the existing Amiga press a section called the "Amiga Resource Center" is included which includes details of the Amiga dedicated magazines available world wide. (Before you ask Clubbed isn't mentioned in this issue but we should be in the next one).

Amiga say that Amiga World is designed to allow them to communicate directly with the Amiga community without hurting the existing Amiga magazines and other resources.

Bill McEwen Interview

Gary Storm Talks to Amiga's President and CEO

Family:

Wife Trish, son William, daughters Ashley and C.K.

Position:

President/CEO, or as I am referred to here Overlord Supreme.

Favourite Movie:

Amazon Women in the Avacado Jungle of Death.

Words of wisdom:

Treat others the way that you want to be treated.

Probably the first Amiga question people may want answered is simply 'why'? Why bother with buying whatever Amiga has left to offer in a world that generally thinks it is a byword for 'games machine' or corporate failure?

Amiga never had a fair shake. It was always part of another "computer" company and while brilliant in all respects it never received the credit it was do.

Are you able to say what happened at Gateway with Amiga? Jim Collas and the crew seemed to have practically everything in place for a major impact on the industry, then: POOF!

Nope. I really do not know what happened. We were moving ahead and then it all stopped. I do not know what happened, and I am sure that I will never know.

Gateway had their chance, and now we are an independent organization focused 100% on Amiga nothing else.

Yourself, Fleecy and Tao seem to have adopted a lot of the Collas strategy, in that you're focusing on what the software (OS) has to offer for various incarnations of computer technology (desktops, STB's, mobile-phones etc.), to be made by OEM's.

I was with Gateway for almost two years working on the plans, and we are

implementing the plans that we had developed. The plans were started in North Dakota with Fleecy, Allan, Jeff and myself. Now we are taking that vision and those ideas and implementing them. There are slight differences but overall we are executing our plans.

You have some of the same partners too (Sun, Corel). Could you tell us more about their interest and importance.

We are implementing the plans that we established years ago. The real shame is that we lost two years in making this a reality.

Why haven't Red Hat Linux, Sun and Corel yet proclaimed their Amiga support on their websites or through press releases?

Corel did announce on their site. Sun will, the announcement did come from them, and Red Hat is forthcoming. There are also many more announcements with other partners.

How much other interest have you garnered throughout the mainstream industry? What have been the common hurdles to overcome when talking to these companies, and what has been their final reaction and comment?

In the U.S. there is a great desire to see the Amiga come back and hold its place, however because of other influences they would like to see some more action. In Europe and Asia there are many companies who are coming forward, and there will be many announcements and products delivered through alliances with those companies.

What Amiga applications have been offered to be ported that you are interested in?

A list will be up on the site by the end of the month. Most are gaming related. There are also many favorites that have committed to come back.

You've stated that the new Amiga will launch with more readily available software than any other computer launch in history. Could you offer more information?

We are targeting 250 applications ready at launch. As the list is released on the site there you will see that we have made great progress towards that goal.

From the 'Classic' Amiga OS, exactly what features are you hoping to migrate across to the new Amiga os? Multiple screens? Intelligent datatypes? Enhanced AREXX? DosDrivers?

There is a list and specification forthcoming. Since I am not in engineering anything I stated here would more than likely be in error. You will be pleased with what we have come up with.

With your development program, how much (and when) will the development boxes be, and what skills will people need to be able to offer something to the Amiga effort?

We will have the specifics up by the end of the month. There are many changes occurring with the plans because of the input of the Amiga community, and because of these changes we are behind 2 weeks from release.

You must have made some inroads with OEM's by now, to produce hardware featuring the Amiga os. Any chance of you letting us know how many you have signed up, and who they are?

Nope. Not telling.

What challenges do you envision Amiga to have?

Keeping up with the demands. For the current community efforts we have 7 years of desires trying to be delivered in 6 months. This is a huge issue. It is a balance.

What is the competition?

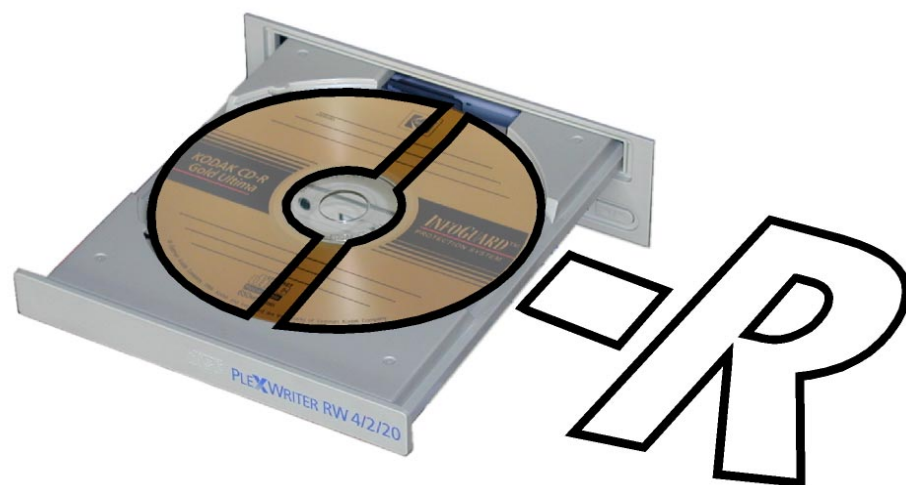
Ourselves. And this is not an arrogance speaking. We are own worst enemy. By joining together we can make something happen, but by tearing each other apart we will fail. I have never seen a group of people who want to see something succeed and then harm each other.

Thanks Bill, we look forward to your announcements and of course the first products from the new Amiga!

Keep Up-to-date

For more regular and in-depth news on Amiga happenings subscribe to Amiga Active Magazine and keep checking:

The official Amiga website: <http://www.amiga.com>
Amiga Fresh, my NG Amiga news site: <http://www.amigafresh.co.uk>
The SEAL website: <http://www.seal-amiga.co.uk>
Czech Amiga News: <http://www.realdreams.cz/amiga>.



Everyone is familiar with the Compact Disc as a medium for music storage and over the last ten years it has become the defacto standard for computer data distribution too. Until quite recently writing to a CD was deemed impossible or at least impossibly expensive. With the development of special recordable and re-writeable discs all that has changed, and over the last couple of years CD recorders and discs have become very readily available at affordable prices.

Data

Originally CDs were designed only for music, hence they are split into tracks with each track being a constant stream of digital data. When the specification for data CDs was decided the concept of tracks was kept, this meant that data and CD audio tracks could be mixed on the same CD. When a data CD is prepared, all the files and the directory structure information is encoded into a single file that is written to the CD as a data track. Fortunately an international standard for the format of this data was agreed called ISO9660, this means a data CD conforming to ISO 9660 can be read on almost any computer platform.

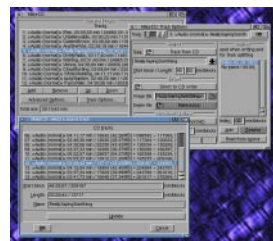
The original ISO9660 specification was fairly limited, for example it only allowed MSDOS style eight character file names. Over the years several extensions to the format were created to cater for operating systems that support more complex

filenames and directory structures. The most common of these are the RockRidge extensions, which are used by most Unix systems and the Amiga, and Joliet, which was designed by Microsoft to support Windows 95's long filenames. Because both of these are extensions to ISO9660, discs created with them can usually be read by systems that do not support the particular extension, however they will only get shortened versions of the file names.

Recordable CDs, unlike most other computer data storage devices, can only be written to once, data added to the CD cannot be changed. This in combination with the fact that data and audio tracks must contain a continuous stream of data mean recordable CDs cannot be written to file by file as you do with hard drives, ZIP discs and other devices.

Audio

Digital audio data is stored on the CD in a format called CDDA which, unsurprisingly, stands for Compact Disc Digital Audio. Each audio track consists of two uncompressed samples one for each stereo channel, the audio is sampled 44100 times per second in 16bit resolution. Most CD-R software takes care of the conversion between sound file formats, and will even interpolate 8bit samples up to 16bit and lower sampling frequencies up to 44100Hz if required.



Compiling a compilation audio disc using MakeCD.

If you want to copy tracks from a CD onto a CD-R you need to get the digital audio into your computer. If you have a sampler this could be done by sampling

Making your own CDs has never been easier or cheaper... Robert Williams investigates.

the audio output of a CD player into the computer, however this will result in a loss of quality because the digital data has to be converted to analog then re-sampled. The other method is to use your CD-ROM drive to read the CDDA data straight off the CD over the SCSI or IDE bus. Unfortunately not all CD-ROM drives can do this at all, others are not very good at it and very few can read CDDA at their full rated speed. Many older drives, particularly IDE drives will not read CDDA over their bus at all, if you try, your software will just give you an error. Other drives will read the audio but it will have audible clicks and pops where it was not extracted perfectly. If your software (usually the CD mastering software includes the option to extract audio) supports it try extracting at a lower speed this may clear up the problem. If your CD-ROM drive cannot extract audio well or at all most CD writers will do the job fine, however you will have to save all the tracks onto your hard disk first then write the disc.

Sessions

The tracks available on a CD, be they audio or data are listed in a Table of Contents (TOC), this acts as a look-up table so the reader can jump straight to the requested track. Because a recordable CD cannot be changed once it is written the, TOC can only be written after all the tracks are finished (this is usually called fixing, finalising or closing the disc depending on your software). Until the TOC is written the CD cannot be read in any reader other than the CD writer. For data CDs this is a problem, as often you will want to add more data at a later date but would like to read the CD in the mean time. To get around this problem you can use sessions, a session is a set of tracks with a table of contents, however when a session is finished (usually called closing or fixing

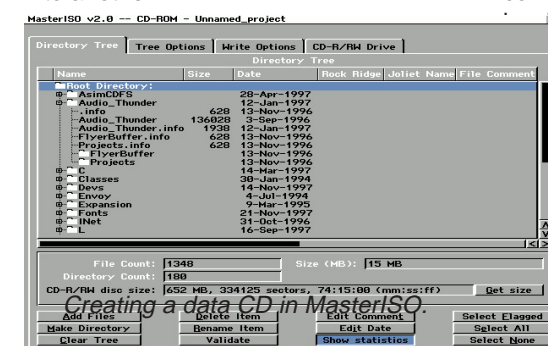
a session) a further session can be opened ready to receive more tracks. When all the tracks in the next session have been written that session is closed with a new TOC. When the CD is read the TOC of the last session is always used. If you tell your software to do so, the tracks in the previous session(s) can also be included in the new TOC, therefore the whole contents of what is now a multi-session disc can be read. Once all the sessions on a CD have been written the disc can then be closed, this means the last session is closed and its TOC written without opening a further session, nothing further can then be added to the disc.

Because multiple sessions were an addition to the original CD specification most (if not all) audio players and some older CD-ROMs do not support them. Readers that do not support multi-session will still be able to access all the tracks in the first session, for audio readers this allows you to create CD-Extra discs, these have audio tracks in the first session and data in the subsequent session(s). An audio player will only recognise the first session and happily play the audio tracks there, while almost all computer CD drives will read both sessions so you can access the data and play the audio tracks. This is safer than combining audio and data in the same session (creating a mixed mode disc) as older audio players may try to play the data tracks which not only sounds awful but could damage hi-fi equipment.

Track at Once and Disc at Once

As I have already mentioned each track of a CD-R must be written in its entirety, the CD writer cannot write a bit, turn its laser off, then write some more later. Normally however, the writer does stop at the end of each track, this means you can stop and add more tracks later and also that any time taken to prepare the data for the next track will not cause problems. According to the CD-R specification there must then be a minimum two second gap before the start of the next track. This method of writing is called Track at Once (TaO), all CD writers and all CD mastering software supports this method. Some times when recording a "live" album where the tracks run into each other with no breaks or making a perfect copy of another disc these breaks are unacceptable. Therefore some CD writers and

some software support another writing method called Disc at Once (DaO), as the name suggests DaO allows the whole disc to be written in one go, the laser is not switched off until all the tracks are written. This allows any length of inter-track gap to be set, including zero so the tracks flow seamlessly one into another.



On the Fly or Image Files?

Generating the ISO9660 data for a track and converting certain audio files to CDDA can be a slow and CPU intensive process. Because a CD track (or the whole CD in DaO mode) has to be written in one operation, your system must be able to prepare the data and send it to the CD writer at the rate it is being written to the CD-R. Depending on the specification of your system and the data being written, you may or may not be able to write the data directly to CD-R or on-the-fly as it is often called. All CD mastering packages offer the option to test a write operation before you perform it for real and potentially waste a CD-R. Test writing does exactly the same as writing for real except the CD writer does not turn on its laser so the disc is not touched. If your system cannot keep up the flow of data required you will get a "Buffer Under Run" message. This means that the write operation had to be aborted because the writer ran out of data to write, if you were writing to the disc for real it would be spoilt, commonly called a "coaster"!

If you do get a buffer under-run (hopefully on a test write) you have a couple of options open to you, one is to write at a lower speed, however you may find that you just cannot write slowly enough for the system to keep up. Also multiple test runs to determine the minimum speed take a lot of time.

The other option is to use an image file for each track, in this case the CD writing software creates a file of all the data for each track in the correct format for

the CD (data in ISO9660, audio converted to CDDA). Then when the disc is written the data just has to be transferred from hard disk to the CD writer, no processor intensive conversion has to be performed. The downsides to this method are that the process will take longer as the image files have to be compiled first and that you need enough free space for the tracks you want to write in one hit, a complete 74 minute CD needs about 740Mb.

CD-R or CD-RW?

Types of recordable CDs are available CD-Recordable (CD-R) and CD-Rewritable (CD-RW), both can be used to create data and audio CDs but there are some important differences. Data is written to a CD-R disc it cannot be deleted or overwritten. You can however add data in multiple sessions to a CD-R so you don't have to fill it in one go. CD-Rs work in most existing CD players and CD-ROM drives. CD-RW discs can have data erased from them, with Amiga CD writing software you can erase all the data from the disc, the last session or the last track. CD-RW discs are far less compatible than CD-Rs, they work in newer CD-ROM drives usually designated "multiread" and a very few audio CD players. CD-RWs are usually at least three times the cost of CD-Rs.

Packet Writing

If you read up on CD writing you will soon come across packet writing, this is a method which allows you to treat a CD-R or more usefully a CD-RW much like any other read-write disk. For example you can copy files by drag-and-drop on the desktop. Unfortunately there is currently no packet writing software for the Amiga. However packet written CDs do have some drawbacks, they cannot be read unless specific driver software is installed and in general the opinion of the PC packetwriting software (such as Direct CD) seems to be that it is very slow and prone to disc corruption. So the lack of Amiga support may not be as bigger loss as it sounds.

Software

A CD writer can be used as a standard read-only CD-ROM drive simply by mounting it with a standard CD file system (as explained in issue 4) however if you want to use it to write CDs a dedicated CD writing package is required. Three major CD writing pack-

What's What?

In this feature, I refer to the drive used to write onto recordable or re-writeable compact discs at the CD writer and the discs themselves as CD-Rs and CD-RWs. I mention this because many people call a CD writer a CDR (CD recorder) which serves to confuse things a bit!

ages are available for the Amiga, surprisingly in the current marketplace all three are currently being developed and have received upgrades in the last few months. You can find reviews of all these packages starting on page 16.

Hardware

There are three aspects to choosing hard ware for CD writing, the most obvious is the CD writer itself but it is also important to make sure your Amiga is up to the task of supplying the writer with the constant flow of data it requires. Finally you will need some CD-R or CD-RW media to actually write on.

CD Writer

A bewildering variety of CD writers are now available, they come with different interfaces, speeds and amounts of buffer memory here I've tried to explain what you need to look out for when choosing one.

Speed

Like CD-ROM drives the speed of a CD writer is stated as the multiple of the original CD audio transfer rate of 174KB per second. Most drives currently on the market write CD-R discs at 4X (600KB/s) or faster, 8X drives are now common and even the new 12X drives are being introduced at reasonable prices. Almost all drives also write on CD-RWs but these are limited to a maximum of 4X, I have read rumours that 8X CD-RW drives are on the horizon. What speed drive you go for really depends on three things, how much you are

prepared to pay, how long you can wait for discs to write and your Amiga system.

Price

2X or even 4X IDE CD writers can be found for under £100 and provide an excellent low cost solution. SCSI writers start at about £150 but you could pay nearly £300 for one of the new 12X units that are just becoming available.

Time

At 1X a complete 650Mb data or 74 minute audio CD will take the full 74 minutes to write plus some additional time to close the disc. At 4X this is reduced to just under 20 minutes, 10 for 8X and just 6 minutes on a 12X drive. However if you're only going to write a CD occasionally waiting 20 minutes for a disc may be quite acceptable, and certainly not worth paying double for the CD writer. Also be aware that especially for audio you may find you cannot write at the full speed of your writer and get acceptable playback quality.

Buffer

To help keep the steady flow of data as the CD is written CD writers are equipped with buffer memory (in addition to the buffer in the computer's memory maintained by the CD writing software). Before writing starts the buffer is filled with data, then if the data from the computer stutters, a few seconds of data is available in the buffer to make up the shortfall preventing a coaster. In general the more buffer memory the drive has

the better, although on a well configured system it shouldn't matter too much. As a guide most older (2X) drives have a 512KB or 1MB buffer, 2MB is common on 4X drives and faster drives can have 4MB.

Drivers

In common with many other generic hardware items you need to make sure that the CD writer you choose to buy is supported by your chosen Amiga software. When consumer CD writers first appeared many manufacturers had their own command set meaning the CD software had to specifically support each drive. Fortunately most manufacturers now use a standard command set which is even common between IDE and SCSI drives. This means that almost any CD writer you can buy today that uses a standard SCSI or IDE (ATAPI) interface will work with all three Amiga CD-R packages. SEAL members have drives from Mitsumi, Plextor and Yamaha allow working 100% reliably for instance. If you're concerned about compatibility and are on the 'net all three software packages have extensive compatibility lists on their websites. MakeCD and MasterISO also have mailing lists where you can discuss different drives with other users.

System Interfaces

As long as your controller (SCSI or IDE) can sustain a transfer rate of twice the writing rate (so you can read from the source and write at the same time) you should be able to write CDRs using an imagefile of the disc.

The type of controller you have can affect the reliability of your CD writing, whether you can write data and tracks from some audio files on-the-fly and whether the computer can be used for anything else while writing. Controllers can be split into two major types, PIO (Programmed IO) and DMA (Direct Memory Access). PIO controller use the Amiga's CPU to transfer the data from the controller into RAM. DMA controllers transfer the data directly into RAM with little CPU intervention. This means that while data is being transferred a PIO controller will use up a lot of CPU time and can effectively cripple other programs running on the Amiga and leave little processor power for on-the-fly operations like ISO image creation. Normal data transfers like loading a file

only take a few seconds so this isn't too important, CD writing can take over an hour, during which the Amiga won't be responsive for other tasks. Worse running another CPU intensive task could interrupt the data transfer, if this happens for long enough the CDR will be ruined.

DMA controllers leave much more CPU time free as data is being transferred so the Amiga can still be used during the CD writing process and on-the-fly operations are more likely to be successful. There is much less chance that a CPU intensive application will cause the burn to fail.

CD Reader

As I mentioned in the audio section if you intend to create audio discs with tracks from other CDs you need a CD-ROM drive that can digitally extract CD audio. You can test your current drive with the demo version of MakeCD, which has the ability to extract audio. If you extract an audio track to disc you can see how fast your drive is and listen to the quality of the extracted track, which should be indistinguishable from the original. If you intend to burn audio on-the-fly your CD-ROM needs to extract audio faster than your CD writer will write it.

Summary

While most Amigas with at least a 68030 processor should be quite capable of servicing a 4X CD writer faster speeds will tax the hardware much more. 8X and 12X drives can exceed the maximum throughput of the built-in A1200 and A4000 IDE interface for example, so even using image files the Amiga won't keep up. With a decent DMA controller based system it should be possible to run any drive on the market today at maximum speed and certainly there are many people using 8X drives with no problems. Remember that even if your system won't fully utilise a fast drive there's nothing to stop you buying a faster drive and using it at a lower speed until you get the hardware that will take advantage of it.

NOTE

There are some problems with certain (mostly older) SCSI controllers and CD writing. For example the Phase 5 controllers for the Blizzard 1200 accelerators, CyberStorm MkI and the Fastlane Z3 can cause problems with older (prior to version 8) ROM revisions,

with a later ROM they are excellent and use DMA too. The Oktagon Zorro II SCSI board is also known to cause problems with older ROM versions. So before you spend any money be sure to research your system compatibility, from what I've seen the MakeCD website has the most details on these issues including listings of systems users have had success with.

Media

Creating reliable CDRs for your application tends to be a bit hit and miss at first especially if you are creating audio CDs. In general data CDs (to be read in computer CD-ROM drives) work reliably when burnt on almost any disc. Reliable audio discs however are burnt using the right combination of CD writer and CD media for the target reader (CD player). Because there are so many possible combinations of writer, CDR and reader it's impossible to recommend a "one size fits all" brand of disc. That said, here are some brands we've used successfully:

Verbatim Datalife Plus

My personal favourite, these dark blue discs seem to work well in all applications and also have a high quality feel to them with attractive packaging and a solid white top surface.

Kodak Gold

These discs look impressive, as they are gold on both sides. Again they work well although they don't seem quite as reliable for audio as the Verbatims. Rumour has it that the gold reflective surface should last longer than the aluminium used on silver discs.

TDK Reflex

Another good all-rounder and as you would expect very professionally presented and packaged. Tend to be a bit more expensive than the Verbatims.

Samsung 80 minute

Some audio projects may need a longer CD than the standard 74 minute CDR length, there are now several brands of 80 minute CDR available. These ones from Samsung seem to work well, unlike the LeadData 80 minute discs I tried which were hopeless for audio (but fine for data).

Designed for Audio

When buying blank discs you may see special "designed for audio" CD-Rs at a considerably higher price than standard

discs. These discs are no better for audio than a good quality standard CD-R. The reason for the high price is that they are designed for audio component CD recorders (which won't work with standard discs), part of the price is a royalty to the music industry.

Conclusion

As I'm sure you've gathered from reading this feature CD writing is quite a complex topic, and I've only scratched the surface here. Loads more information is available in the documentation of the various software packages and at the Internet resources I've listed in the Hot Links box out. That said once you have a reliable system sorted out you'll find that backing up your hard drive or making the odd audio CD is pretty straight forward.

Although CDRs may not be quite as convenient as large capacity removable drives like the Jaz and Orb for data storage and backup their low cost and transferability make them a very practical alternative. Plus they can be used for audio work too, all in all a CD writer is a very useful addition to any Amiga.

CD-R Utilities

Here are a couple of utilities which you may find useful in addition to your CD writing program. They can be found on Aminet either on the 'net (<http://uk.aminet.net/~aminet/>) or on the CDs. You may also find the CD utilities we reviewed in the issue 4 of Clubbed useful.

IdentCDR.lha (disk/cdrom)

Simply give this tiny utility the device name and unit number of your CD writer and it will display a variety of information about the CD-R disc inside. This includes the actual manufacturer (as opposed to who prints their name on the label), the total recording time available and the type of dye used.

MakeBackup.lha (util/bakup)

CD-Rs make a very useful backup medium until you have more than 640Mb to store. This handy utility scans the drive or directory of your choice and makes a file list for each 640Mb of files. These lists can then be loaded into MakeCD and the files burnt to CD-R. The end result is all the data spread over a set of CD-Rs.

Hot Links

World Wide Web

CD-R FAQ - <http://www.fadden.com/cdrfaq/>

Comprehensive FAQ, answers common CD writing questions and in the process explains the key concepts.

Mike Richter's CD-R Primer - <http://resource.simplenet.com/>

Somewhat Windows centric but very useful introduction to many aspects of CD writing from a users point of view.

Amiga CD-R Software Homepages (URLs with reviews starting on page 16)
Probably the best resource for Amiga specific information.

News Groups

(can be read on the web at <http://www.deja.com/usenet> or similar)

comp.publish.cdrom.hardware

This news group discusses CD writers and discs ad infinitum, useful for getting a feel for people's opinions on different drives.

comp.publish.cdrom.software

Mostly discusses Windows (and occasionally Mac) CD writing software but also covers many platform independent issues.

Something Fishy

Reviews are very subjective, what one reviewer may love, another hates. Such is life. So we decided to have a general score, which the reader can take into account along with the text.

So we invented the fish... it's easy to work out which we feel is a better product... the more bones that show, the smellier the fish :). We only award our top Caviar rating to products that are practically perfect.



The best so far! We can hardly pick anything out of it, not even boogers. Rarer than Nessie.



This product is definitely worth buying but, like most things, still has room for improvement.



Average, neither too good nor too bad — it works but there are areas which need major improvement or are way behind competing products.



Crap, but hopefully getting better in future versions (if there are any).



Disgusting, multicolour yawn inducing abomination that insults the Amiga.

CD-R Software Round-Up

CD writing is not an area where the Amiga lacks software, Robert Williams & Robert Davis review the challengers.

BurnIT 2.65

Developer: Titan Computer
WWW: www.titancomputer.de
Price: 153DM, about £53.00

BurnIT's initial window consists of nine icons, each of them opens a separate window controlling a particular aspect of the program. It has to be said that BurnIT does not make a good first impression. Unless you have a Magic Workbench palette lock installed, the icons are horrible colours, the GUI is not font sensitive and uses Topaz in most windows, all in all it looks old fashioned. However, the look of a utility program is far from its most important feature so let's see what BurnIT can do for us.

Audio

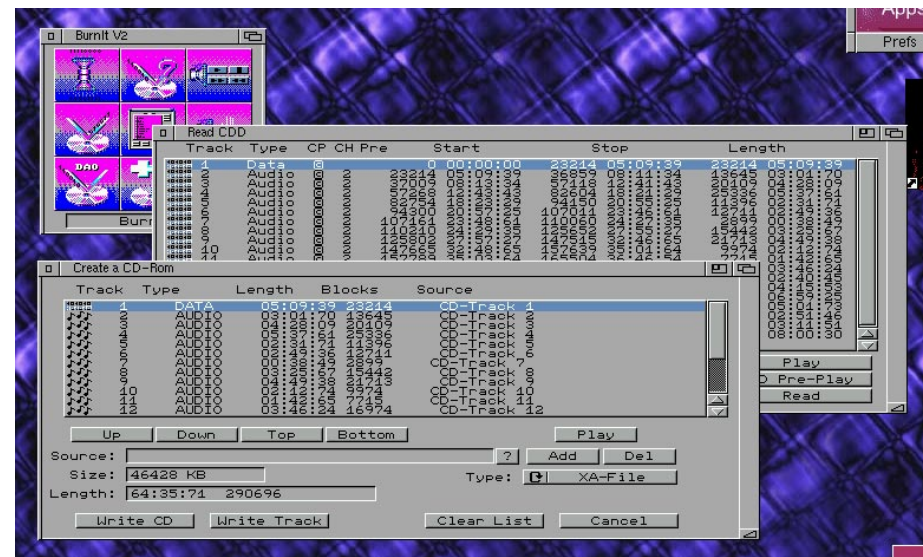
The audio facilities of BurnIT are extensive and utilise five out of its nine windows. The Read CDD window lists all the tracks on the current CD in your reading drive and allows you to save each track as an audio file to hard disk. If you want to burn some or all of the tracks direct to disc TaO you can drag and drop them into the TaO editor, however I found this rather erratic, it didn't always move the tracks I expected. You can burn audio files in various formats including WAV, MAUD and MP3 direct to an audio CD, MP3 support uses the mpeg.library which is available for 680x0 and PPC processors. A page in the preferences window allows you to make image files for MP3 tracks before writing if your system isn't fast enough to decode them on the fly. BurnIT also has a simple audio editor built in, this operates on files on disk so you need to use the Read CDD window to read in

your tracks before you can edit them. Once you have the tracks saved to disk apply editing operations such as cut which deletes unwanted areas, and apply filters like de-crackle and fades. Once the tracks are prepared they can then be burnt TaO or DaO using the appropriate window.

The audio support doesn't even end there, if your CD-ROM and CD writer are compatible BurnIT will read and write CD-Text (CD title and track information stored on recent CDs, and displayed by some new players). There is also a CDDB facility which will connect to an on-line database of CD titles and track names and download the information for the current audio CD. Once you have the track information BurnIT can add CD-Text to the CD you're burning, there is even an AREXX macro supplied to automatically print a CD cover with all the track information in PageStream 3.

Data

The ISO Maker window has a list view showing each directory and subdirectory which will be added to your CD. Clicking on the drawer icon beside each directory listing opens a list of files in that directory. An app icon on Workbench allows you to add the contents of a directory or volume by drag and drop. BurnIT then scans the directory structure and displays it. You can delete files and directories you don't want to have on the CD, and add files to the existing directory structure. The rename option allows you to change file and directory names, when you rename a directory you can edit its path and therefore move it in the directory structure of the CD. There are two things I would like to see added to the ISO Maker, one is the option to create a new directory on the CD, currently the only way is to add a directory from disk and rename it, and the other is the option to add files and directories within an existing directory on the CD. Currently if you add a directory or file it always ends up at the top level of the directory structure, moving it is a major task as every directory has to be renamed with a new path.



BurnIT's nine windows all accessed from the main panel can be a bit confusing.

Program Design

As I mentioned before, BurnIT's main windows are accessible from the nine buttons of the initial window. Each of these windows almost feels like a separate program because there is little commonality between them, for example the DaO and TaO windows look and work completely differently even though they have a similar function. This feeling of separation is reinforced by the fact that in several areas of the program you have to save a data file only to load it into another section. I feel this design makes BurnIT more difficult to learn and use because the steps required to carry out an operation are not logical from the GUI design.

Documentation

According to the Titan website BurnIT DaO is supplied with both printed and Amiga Guide documentation. We didn't get a printed manual with our review copy but the Amiga Guide is pretty com-

Supported?

All three programs support a wide range of SCSI and ATAPI CD writers, far too many to list here. If you want to find out if your particular writer is supported it's best to go along to the program's website where they each have an extensive list. Even if the writer of your dreams isn't listed most modern drives (including the latest Yamaha and Plextor models) use a standard command set and thus work with a generic driver supplied with each program (MakeCD's driver is called CDR_SCSI3_ATAPI).

prehensive describing most of the program windows along with a set of tutorials to help you complete common CDR operations like data and audio CD creation and copying. In the AmigaGuide manual we found several sections listed on the contents page were missing including the descriptions of some of the sub windows and an FAQ, while none of these were vital the documentation was not complete. The documentation contains no background information on CD writing which is quite important for beginners although this is available on various Internet sites (see the CD-R feature on page 12).

Conclusion

BurnIT has lots of facilities including a powerful data CD builder and the best audio facilities of the three. The interface is far from perfect but it does do the job once you get used to it. Despite my reservations about the GUI BurnIT does provide a balanced set of impressive features and all these programs will take some learning due to the complexity of CD creation. The on-line manual, while being out classed by the other two here, provides some good tutorials to get you going on common operations (building data and audio CDs and CD copying).

Results



MakeCD 3.2c

Developer: Patrick Ohly & Angela Schmidt
WWW: makecd.core.de
Distributor: HiSoft
WWW: www.hisoft.co.uk
Tel: (0500) 223660
Price: TaO Version £34.95
DaO Version £49.95

The process of creating a CD in MakeCD revolves around the Tracks list in the main window. Whatever the type of CD you build up all the tracks you want in the list, choosing all audio tracks creates an audio CD, all data a data CD and you can choose a mixture to make a Mixed-Mode CD. If you have audio or track image files ready to burn you can just drag them from a Workbench window into the MakeCD track list to add them to the CD then use the Up and Down buttons to arrange the tracks. You can individually set whether each track will be written direct to CD or if it will use a hard disk image file (which is less processor and data intensive). To write in TaO or DaO mode you just flip a cycle gadget in the Advanced Options window.

Data

Data CDs can be created from any volume available on your Amiga. In the ISO Image Prefs window you can choose the volumes or directories you want to include on the CD, all the files and directories inside these will be included on the CD. MakeCD supports ISO9660 discs and the Rock Ridge extensions which means you can burn disc compatible with almost all platforms including PC (DOS, Windows, Linux etc...), Amiga and Mac, however it doesn't support the Windows specific Joliette or Mac HFS formats. You can even make bootable CDTV, CD32 (requires a CDTV.tm or CD32.tm file which is on the Amiga Developer's CD) and MS-DOS (bootable PC) discs if you so desire. If you want to create a data CD with a different directory structure to the source hard drive you will need to build your CD on the hard drive first because MakeCD does not include a directory structure editor.

Audio

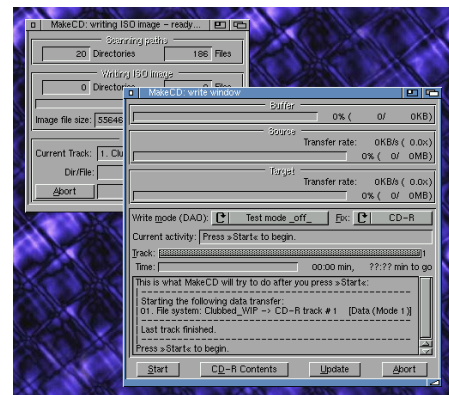
MakeCD is very flexible when it comes to burning audio CDs, you can burn tracks directly from other CDs or a wide variety of Audio files. Supported formats

include AIFF, MAUD, WAVE (.wav), CDDA, Samplitude and MPEG audio. MPEG support uses the mpeg2.library which is available in 68k and PPC versions. If you have a fast 040, 060 or a PPC card you can even burn MP3 audio files direct (slower processors can use an image file) to a CD which will play on any audio CD player! A common use of the audio CD functions is to create compilation CDs using tracks from CDs in your collection. In TaO mode (where the writer's laser stops between tracks) you burn tracks from several source CDs without using image files, simply swapping source discs when requested, however you do need to make a note of the track order as MakeCD has no way of knowing what each source CD is called.

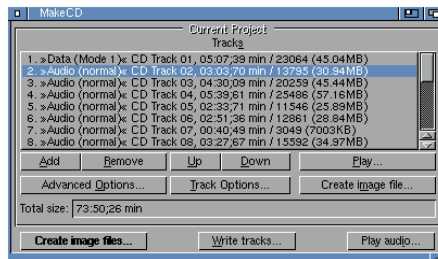
If you have a particular CD you commonly have to burn, MakeCD allows you to save the current track layout and settings as a project file. So, for example, if you commonly backup your hard drive to CD you could set MakeCD up, save a project, then simply load it up every time you wanted to make that backup.

Copying

You could copy a CD using MakeCD's normal interface just by adding all the tracks from the source CD to the list, however this would be quite a time consuming task. To aid you in this process MakeCD has a Copy CD option which opens a separate window with just the options you need. This window allows you to change options such as whether to use an image file and if the disc should be burnt TaO or DaO. Once you're happy with the settings clicking the CopyCD button will take you straight to the Write Tracks window to burn the CD. There is also a Setup Project button which will add all the tracks to the track list with the settings you chose, so you can make alterations or save the project if you want.



MakeCD's Write and ISO Image windows give plenty of status info.



MackCD's interface centres around the track list.

Burning

When you come to burn your CD MakeCD opens its Write Window, here you choose whether to do a test burn and how the CD-R should be fixed. Clicking on Start then causes the MakeCD to start writing or test writing to the CD. At the bottom of the Write window a large text box displays information about the track being written. The top half of the window is taken up by several progress meters which show you the progress of the current track, and the CD as a whole amongst other things, you really couldn't ask for more information. One slight annoyance is that you cannot change the write speed from the Write Window, if you find your write speed is too fast or indeed too slow when you test you have to abort out of the write window to change the option in the settings requester.

CD-RWs

Rewriteable CDs are treated just like normal CD-Rs by MakeCD the only difference being that you can erase them in various ways after they have been recorded. You can erase the session fixation (so you can add further tracks to a session), the last track, last session or the complete CD. For a complete CD two erase methods are offered, fast which takes a few minutes (the exact time depends on your CD writer) and thoroughly which takes as long as writing all the data on the CD-RW.

MakeCD is very well documented with a printed manual, on-line Amiga Guide and extensive bubble help. The short printed manual supplied by HiSoft consists of an introduction to the basics of CD writing followed by a series of illustrated tutorials and a glossary which serves to get you started. The manual is obviously aimed at HiSoft's squirrel customers, it strongly recommends against any on-the-fly operations which are fine on faster controllers. The Amiga Guide manual is very comprehensive with more tutorials and a reference section

covering all the windows and options. There is also an FAQ section and list of the various CDROMs and writers supported and the many tested configurations. MakeCD's bubble help feature can be switched on at any time from the program menus and brings up extensive help when you rest your pointer over a gadget for a few seconds, a boon when your learning the package (although you'll soon want to switch it off!). Finally MakeCD has an excellent website at <http://makecd.core.de/> which boasts an even more extensive set of documentation and links to some excellent CDR resources, there is also an active mailing list.

CD writing tends to be quite complex and MakeCD's full set of options can be quite off putting to beginners. To avoid this option overload the authors have included a Novice mode which simplifies each window to provide only the essential settings. As the program is supplied the novice mode allows you to easily create audio CDs Amiga compatible data CDs.

MakeCD's design, which centres around a single track list regardless of write mode (TaO or DaO), makes the most sense to me. However it does mean that some functions are "hidden" in sub windows. Once you know your way around it's easy to master, and means you can see all the options available to you. You will probably need to refer to the excellent on-line documentation and pop-up help at first as you find your way around. While data CD creation is probably MakeCD's weakest point (it lacks a full directory structure browser and Joliet support) it does have everything you need for normal backups and you can always setup the structure of more complex CDs on disk before you start burning. Audio capabilities are comprehensive with support for a wide range of file formats including on-the-fly MPEG decoding, in my experience MakeCD is the easiest of the three for making CD compilations.

Results



MasterISO 2.5

Developer: Asimware Innovations
WWW: www.asimware.com
Distributor: Blittersoft
WWW: www.blittersoft.com
Tel: (01908) 610170
Price: Alone £49.95
 W/ AsimCDFS £69.95

I am aware of three packages for the Amiga to write to CD ROM disks. I bought MasterISO in the autumn of 1999, and the program works well for me.

As I write this review in early March 2000, the current version of MasterISO is 2.5. I suggest you do not upgrade to that version. MasterISO comes on its own CD at version 2.3, and once you have the registration code printed on the card packed with the CD, you can download the upgrade to version 2.4. That one works.

When trying to create an audio CD, version 2.5 gave an error message every time I attempted to write the data to the disk, either for real, or when trying to simulate a disk write. Version 2.5 did work with no errors when writing data CDs. The president of the Kansas City Amiga User's Group, Bob Kennedy, tells me he also went back to version 2.4 after difficulties using 2.5.

Another problem with MasterISO is the repeated display of the yellow "Recoverable Alert" messages. On my Amiga, I have been able to get through each of those alerts without a problem, but they appear continually, as I move from window to window in the program or when I choose to quit MasterISO.

At this point, I should explain that MasterISO runs on my A3000 desktop, with an A3640 card. The cpu is the 25-mhz 68040, the machine has 50-meg of ram, and a GVP-M Spectrum video card. My CD writer is a Philips CDD-2600 which writes standard CD-R only, not CD-R/W. The 2600 is attached to the A3000's built in SCSI host adapter. The A3000 runs Amiga OS 3.5.

I do not have AsimCDFS, from the same publisher as is MasterISO, so I cannot copy CDs directly from my Toshiba 32X reader to the CD-R. That "Disk At Once" or DAO procedure would be quite useful, and I shall eventually purchase AsimCDFS. But I can still do TAO or Track At Once recording and I have been able to copy some music files to a

hard drive and then create an audio CD from those files.

Audio files for playback on a CD must be captured at a rate of 44100 samples per second. Samples at a lower rate will sound a bit odd when you play them back at a multiple of their sampled speed.

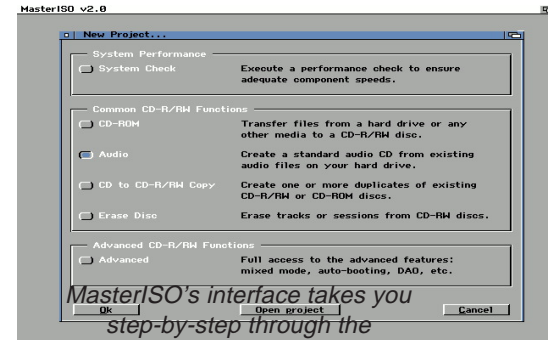
I bought MasterISO for one project. I am continuously updating a CD of pictures and other data files from the Amateur Radio balloon flights in which I participate. Since I'm adding to the data regularly, I just keep a directory on my hard drive with the information I need to put on the CD. Whenever I capture more pictures or need to add other files to the CD, MasterISO allows me to easily update the project. And it will write to my CDD-2600 at its maximum rate, slightly above the 300K byte per second 2X data rate advertised for this particular drive.

Earlier versions of MasterISO came with a printed manual, but now the manual is a set of pdf (Adobe Portable Document Format) files on the CD containing the program. This keeps the cost down for the publisher, and makes the Amiga owner do a bit of work to find an appropriate pdf viewer just to read about the program. I prefer Apdf, available in several versions from the aminet archive.

A problem with the manual is that there is just no listing of error codes or potential common difficulties which the new user may experience. The instructions do offer a fairly detailed explanation of how to create either a data CD or an audio CD, but it makes assumptions about the user's knowledge, which were, at least in my case, overly optimistic. I obtained some explanations of MasterISO features from "Saraba" in the Undernet IRC channel #amigacafe. Thank you Saraba.

I shall not attempt to enumerate all the features of MasterISO. The important part is that it writes CDs which I can read on the Amiga, and on my Windows 95 computer. I have not had an opportunity to try the disks I've created on a Macintosh, but one Mac user reports success reading an early version of my Balloon CD. I always configure MasterISO to make data CDs simultaneously ISO-9660 and Joliet filesystem compatible.

MasterISO is a product of Asimware, in Hamilton, Ontario, Canada. They main-



tain a website at:

<http://www.asimware.com> where you can read about their programs, download updates, and most especially, get the current list of CD-R and CD-R/W drives which work with MasterISO, most do. A demo version of the program on the website will work to show you what the program looks like, but it is non-functional. Unlike the MakeCD demo, the MasterISO demo won't write a CD.

My comments about MasterISO have been at times negative, but I must say that I like the program. It does what I want it to do, and even with the occasional glitch, it does not crash my A3000. It works. I am pleased with my purchase, and I look forward to a version 2.6 update which will fix the audio recording problem I have with 2.5.

By Robert Davis

Results



Summary

It's great to be able to conclude that all three of these packages will allow you to reliably create audio and data CDs with few problems. The all have the basic features required and I think most people would be satisfied whichever they purchased. All of them have minor flaws or omissions but there is nothing that can't be learned (e.g. BurnIT's interface) or worked around (for example MakeCD's lack of directory structure editor or MasterISO's lack of MP3 support).

fxPAINT

This new image processing package has a feature list as long as your arm. Robert Williams finds out if it lives up to expectations with the help of Mick Sutton.

fxPaint is a new image processing program from a German company, Innovative. On the surface fxPaint seems to have been designed by taking the best parts of existing Amiga graphics packages and moulding them into a new application. Several parts of the program that are strongly reminiscent of other packages: the rub-on rub-off painting system of Photogenics, the brush handling of ArtEffect and some of the effects are very similar to those in ImageFX. However fxPaint is an all-new program so while the features I've mentioned must have surely be inspired by the other packages, they are often implemented differently, some times for the better, other times not so successfully.

Installation

fxPaint is supplied on CD-ROM and, as we've come to expect, installs very simply onto your hard drive using the standard installer. A few example images are supplied along with a tutorial video which accounts for about 222Mb of the 276Mb on the CD. The video, which is in AVI format, shows creating a paint-on fire effect but is pretty hopeless as there is no commentary and resolution is too low to see what options are being chosen. It would have been nice if the CD could have been filled with more example images, brushes and the like.

Product Information

Developer: Innovative
WWW: www.innovative-web.de
Distributor: Blittersoft
Tel: (01908) 610170
WWW: www.blittersoft.com
Price: £50

On loading fxPaint you are immediately struck by the lush, attractive interface, there are colourful icons, a backdrop texture and the text buttons in requesters have a subtle gradient effect. The interface is based on multiple windows and tool bars. Each image is loaded into its own window and there is a useful bar across the bottom of the screen which holds thumbnails of open images. All this visual splendour makes a graphics card almost essential. Although fxPaint does run in 256 colours on AGA Amigas image display quality is patchy, Screen updates are slow and the low resolution screens make using it a chore.

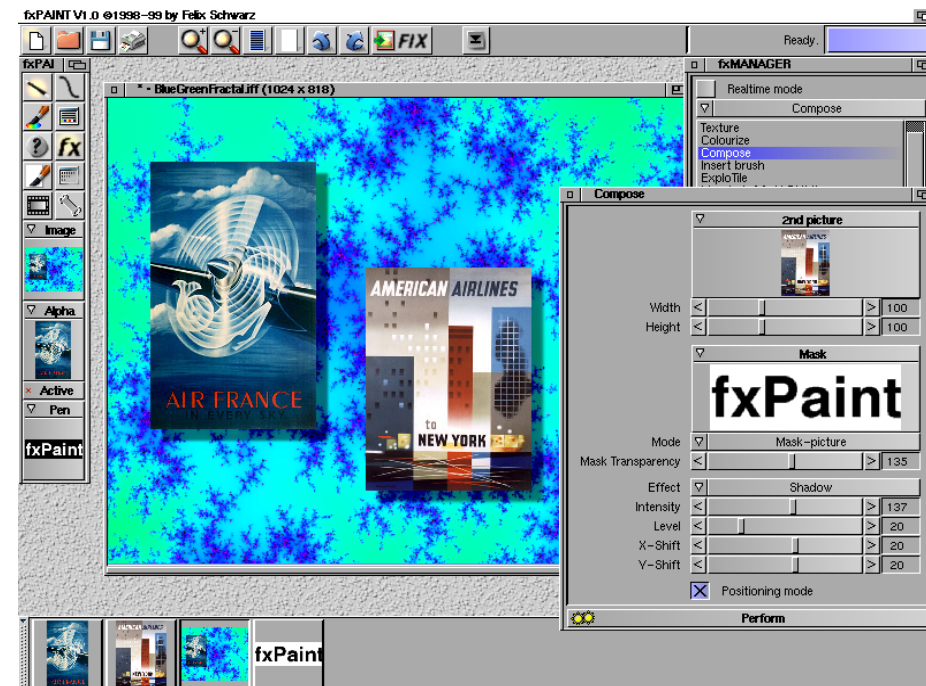
Processing

At the core of fxPaint is a paint-on image processing engine similar to Photogenics 2. You can apply fxPaint's entire range of image processing effects to the image with the painting tools provided. Applying a blur, emboss or any other effect over just the area you want is as easy as selecting the effect and painting on the image. Rather than directly effecting the image you paint onto an invisible layer over it, the changes are only made permanent when you click Fix in the toolbar. This means you can erase any mistakes by simply painting over them with the right mouse button or clear everything you have done since the last fix with the clear layer button. You can also apply an effect on the whole image using the fill layer button. At any point you can adjust the settings of the effect applied, change the paint colour or even change to a different effect entirely. fxPaint is limited to a single paint layer so you cannot mix effects and keep them all editable. It is

possible to save the paint layer so you can apply an effect to the same area later.

fxPaint has over 50 different effects, these are split into groups in the fxManager window. Most effects have an options window that can be accessed using the Options button, also in the fxManager window is a Real Time check box. In Real Time mode the effect over the whole image is calculated as soon as you pick a new effect or change a setting. On complex effects this leads to a long delay every time you change an option even if you know there are several changes you need to make. With Real Time switched off the effect is only calculated when you click Perform in the effect's Options window. While this method does work, it is not as natural as Photogenics which interrupts the application of the current effect as soon as you change an option. fxPaint has a progress bar at the top of the screen, unfortunately this doesn't seem to work when applying effects, it sits at the bottom while an effect is being processed only to jump straight up to 100% when the job is done, not very useful. Another annoyance is that fxPaint is not multi-threaded, you cannot do anything with the program while it is processing an effect. To compound this the busy pointer is not displayed while the program is locked during processing so it's not obvious you can't do anything until it has finished.

The effects available comprise of all the standard operators you would expect like emboss, blurs, convolve, and a wide range of colour manipulation options. There are also some more interesting effects which include:



fxPaint has an attractive interface with some posh effects. Shown here is the compose effect, simple compositions like the one shown take just a few clicks.

Compose

The compose effect has a large options window where you can choose the image that will be composed over the top of the current one. Position mode allows you to move the second image around and you can apply an automatic shadow or glow. Unfortunately both the shadow and glow effects seem to be limited to a preset colour (black and white respectively) which limits their usefulness. There is also the option to use an alpha channel to mask the secondary allowing non-rectangular images to be composed with glows etc. this could have been very useful with a text alpha channel but we were unable to get it to work.

Bumpmap

This effect works in a similar way to compose except you can also apply a bumpmap to the composed image and have a lighting control. Also for this effect the alpha channel feature works so you can have bumpmapped, textured text (or other shapes) floating above your image complete with shadow or glow. One limitation is that the light source applies to the background too, so to get the bump and shadow effect you want often causes heavy shading on the background that you may not want. Another problem is that the mask isn't gradual so you get a sharp edge to your object even if the mask is anti-aliased. This effect is very similar to the excellent CandyFactoryPro but at the

moment the limitations I have mentioned mean the package that inspired it is much more useful.

fxAlbum Mosaic

This allows you to recreate the "photo mosaic" mosaic effect that has been used quite a lot on TV recently, especially in BT's ad for their "Together" package. In fxPaint you simply use the fxAlbum plug-in to make thumbnails of all the images you want to make up the tiles of your mosaic then while the Album's still loaded invoke this effect on your chosen picture. You can set the X and Y size of the tiles then fxPaint builds up the mosaic using the Album image closest to the colour of that area of the main image. With the right main image and a good selection of correctly coloured images in your album this can produce a really good effect.

Although the range of effects provided by fxPaint is certainly impressive many of them do suffer from a lack of flexibility. Some, such as the distort effect (which has just two types of distort with no strength adjustments) are really crippled, others like the compose effect mentioned above just feel limited. In some ways the simpler effects do make the package easier for the beginner, with less potentially confusing options, however they can be frustrating once you get going. In the Settings window there is a user status setting that we hoped might simplify the effect options for novices while offering expert users the full range. Unfortunately this does not

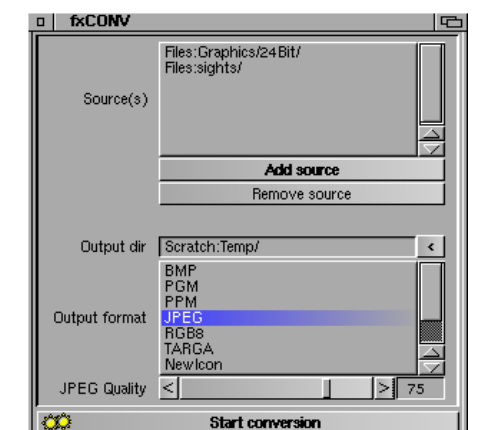
seem to be implemented, in fact we couldn't spot any differences in the program whatever experience level we set.

One particularly nice aspect of many effects is the "Position Mode" button, this allows you to set the centre of an effect (such as a radial blur or light source) by clicking the image rather than entering co-ordinates.

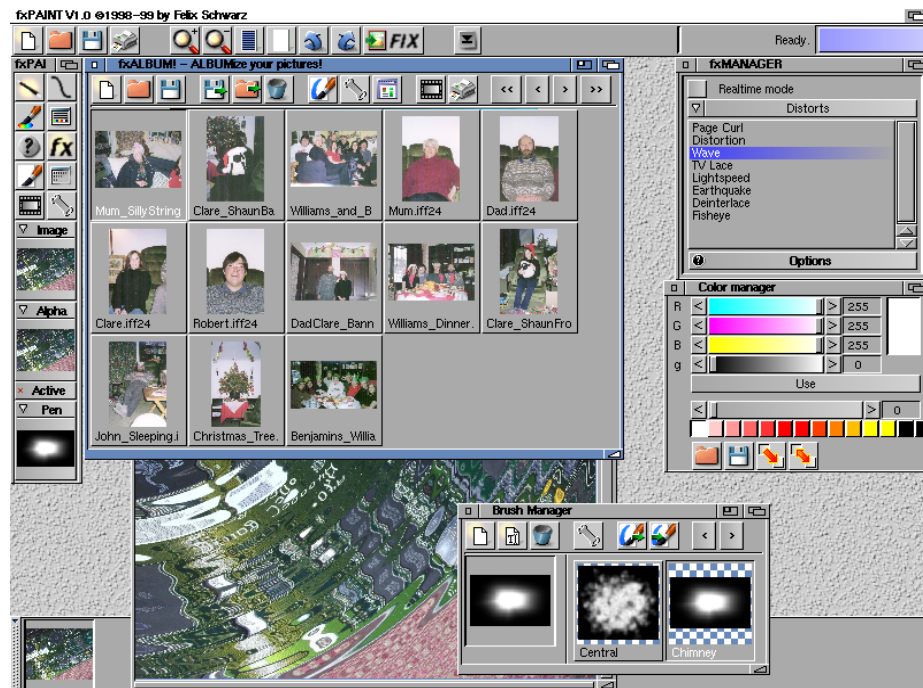
A range of painting tools are available from a pop-out list in the tool bar including all the normal options like freehand, line, circle, rectangle (both filled and unfilled) etc. The Brush Manager window controls the brush used in freehand mode, and allows you to generate new ones. Thumbnails of all the available brushes are shown and you can create circular brushes of varying size and density easily. You can also load existing greyscale images to use as a brush and perform basic operations on brushes like scaling or applying a border. For more complex editing you can export the brush as an image, use any of fxPaint's tools and effects on it then reload the altered image. The Brush Manager can also create brushes from a line of text in any system font so you can add text to your images. While the brush manager allows complex brushes to be created there is no easy way of quickly adjusting the brush size and density while you paint, you have to make a new brush or edit one of the current ones to get the effect you want.

Other Features

fxPaint has the usual selection of image manipulation tools including resize, rotate and skew although strangely there is no crop tool. It also includes functions to create fractal and fire effects. In addition to this several powerful plug-ins are supplied, the main ones are:



The fxConv add-on is ideal for simple batch file conversions.



fxAlbum makes finding and loading a particular image easy. Also shown here are the fxManager, Color manager (palette) and Brush Manager windows.

fxAlbum

A very handy plug-in that creates a thumbnail catalogue of all the images in a directory. fxAlbum can be set to scan all the sub-directories of the directory you choose, so you can easily create a catalogue of a complete CD or hard drive partition. Once the catalogue has been created (quite a slow process as each image has to be loaded then scaled down) you can save it to disk and recall it later even if the disk containing the images is no longer available. There is also a function to automatically create a HTML page with thumbnails for all the images for browsing outside fxPaint (even on other platforms) or for uploading to the Internet.

fxImageMap

This plug-in automatically creates the HTML code for a client side image map. This means you can designate hot-spots on your image which will link to another web page when a user clicks on them in their browser. fxImageMap only supports rectangular hot-spots but this isn't a major problem as they are the most commonly used type.

fxConv

Converting whole directories of images into a different file format can be tedious, fxConv to the rescue! This simple plug-in takes a source and destination directory then converts all the images in the source directory to the format of your choice and saves them

into the destination directory. A very useful tool only limited by the file formats fxPaint supports.

File Support

fxPaint covers most of the bases as far as file format support is concerned, with only GIF, PNG and PhotoCD support really lacking (although it supports datatypes for loading, including the latest OS 3.5 ones). There is no facility to save palette based images at all so you will need an external package if you want to create transparent GIFs, low colour workbench backdrops, game graphics and the like.

Speed

One of fxPaint's big selling points is that it takes advantage of the latest Amiga add-ons including PPC cards. Both Haage and Partner's WarpUP and Phase 5's original PowerUP are supported. While fxPaint definitely uses the PPC (there is virtually no 68k CPU usage when the effects are executing) this doesn't seem to give as much speed improvement as you would think. In other packages (like Tornado 3D and the VisionFX PPC modules for ImageFX) there seems to be a 5-10X increase in speed for processor intensive operations between my '060/50 and the PPC604e/233. With fxPaint a 2-3X increase seems more usual. In most cases on a 68K only system fxPaint was slower than ImageFX and Photogenics with similar effects, in some cases much

slower, this was particularly noticeable when we tested the packages on an '030. All in all this means that some of fxPaint's slow effects are barely faster running on the PPC than the other two on the '060!

While fxPaint's speed is acceptable on '060 and probably '040 based systems, on slower Amigas where both ImageFX and Photogenics would still be usable it is really too slow for serious use. Another minor niggle is that while fxPaint seems considerably faster under WarpUP, but I could find no easy way to force the program to use WarpUP while the PowerUP libraries are installed.

Conclusion

fxPaint is a reliable, well presented package with a very wide range of features, at a good price. I wouldn't hesitate to recommend it to anyone who wants a do-it-all package for basic image processing, cataloguing and format conversion and has the system to run it well. Unfortunately a system that runs fxPaint well really needs an '060 and a graphics card, and even then it doesn't feel that fast. If you already have an image processor like Photogenics 4 or ImageFX I don't think you'll find much in fxPaint's image processing armoury that is new. The basic structure of the program is also less flexible than either of the "big two" with their multi-layer systems. fxPaint is so polished it is hard to remember that this is version 1.0, there are three things I would really like to see in future versions; better optimisation (so fxPaint is faster), a more responsive GUI and more options for some of the effects.

Results

Pros

Wide range of effects
Useful plug-ins included
Very reliable and bug free

Cons

Some effects feel slow even on PPC.
Some effects have limited options.
GUI can be frustrating.

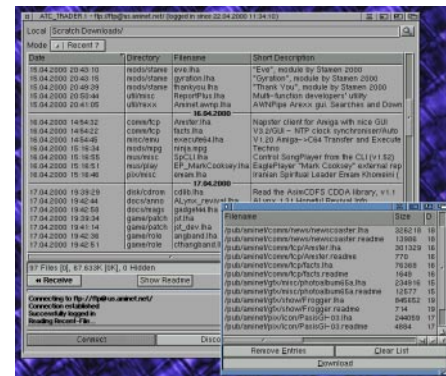


AmiTradeCenter

Robert Williams tries out this brand new freeware FTP client.

Sometimes when you look at the Aminet recent list you find nothing of interest, or download an archive with an interesting description only to find a low quality program, which crashes in the first five minutes. Other times you download a seemingly innocuous archive and inside is a real gem. AmiTradeCenter (ATC to its friends) definitely falls into the second category.

ATC is a File Transfer Protocol client, FTP is used to transfer files between computers on a network and is very popular on the Internet. From an Amiga user's point of view the two most popular uses of FTP are probably downloading from the massive Aminet archives and uploading websites to your ISP. ATC has both of these activities well catered for. For Aminet it offers extensive ADT (Aminet Download Tool, enough of these Three Letter Acronyms already!) support which means you can opt for a list of files that have been uploaded to Aminet



This trader window is logged into an Aminet site in ADT mode showing recently uploaded files. You can sort the list by clicking the column headings. The small batch download window allows you to easily add files to download without tricky multiselections.

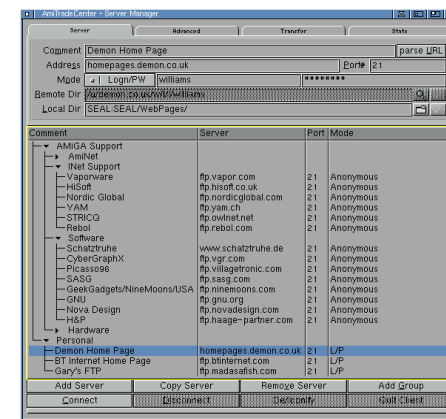
Product Information

Developer: Matthias Böcker
WWW: www.amisource.de/ATC
(for the latest beta)
Aminet: comm/tcp/AmiTradeCenter.lha
(for the release version)
Price: Freeware

since you last looked, vote on your favourite downloads, search for particular files and much more. On the website front, ATC can upload or download a whole directory structure to your website in one action, currently it doesn't support uploading only newer files but I'm sure that this will come soon with the current rate of development.

The main ATC window contains a grouped hot list of all the FTP servers you have configured. The options for the current server are set at the top of the main window so you don't have to open a separate window to change options. There is also a statistics tab so you can check the performance of a site; this can help you choose the fastest server for large sites like Aminet.

Connecting to a server opens a separate "Trader" window, this means you can connect to several servers at once, without running multiple copies of ATC (although you can only have one connection per server entry). Once connected you can choose either a dual column view with a local hard drive directory on the left and the remote FTP site on the right or just the remote site with the local path picked from a popup file requester. As you browse the remote directories you can download files at once or add them to a batch list so you can grab files from several directories in one session.



AmiTradeCenter lets you add commonly used FTP servers to a higherarchical server list. The options for each server are at the top of this window.

Once the download has started, a comprehensive window gives you all the information you could possibly want including the progress of the current file and the download as a whole and a graphical history of the connection speed. At any time you can change the order or remove items from the download list. Another unusual feature is a speed limiter to stop other Internet programs being swamped by a large, fast FTP download.

On top of all this functionality ATC has great support via its mailing list where the author announces a new beta implementing user's requests very regularly. The members of the ATC team all seem to have a great sense of humour and really enjoy what they're doing which is really fantastic to read in these days of Amiga doom and gloom. Anyone who programs an FTP client with built-in Tetris for those long downloads is OK in my book!

ATC isn't perfect, there are a few areas that could use minor improvements and currently the docs are in German only. But it is so stonkingly at version 1.0 that I'm going to give it Caviar anyway... well done Matthias Bocker and the ATC crew!

Results



Wildfire

Robert Williams finds there's more to Wildfire than just an animation processor.

Wildfire's role in life is to take an input which can be an animation, sequence of frames or a single image, apply effects to each frame and then output a sequence of frames, animation or indeed a single frame. In Wildfire the data being processed is called a stream, the stream is made up of one or more frames and can have effects applied to it by operators before it is output. At each stage of this process Wildfire is very flexible which means it can be used for a wide range of tasks. For example in addition to animation processing, you can use Wildfire to apply the same effect to a selection of single images, to convert images from one file format to another or to compile a sequence of frames into an MPEG movie.

Operators

Wild fire has about a hundred operators which you can apply to your stream, each one is listed in the Effect Plugins window which also has a thumbnail example of the selected effect. An operator does not necessarily apply an image processing effect (although all the standard ones are available), there are operators which load other images into one of seven temporary buffers so they can later be used by an effect which needs more than one image (for example a compose or cross fade). There are also a wide selection of 3D effects, these are really stunning and include the option to wrap the current frame around a sphere or cube or indeed any Lightwave 3D object (a selection are supplied). Another cool (although perhaps less useful) effect is ParPlot

Product Information

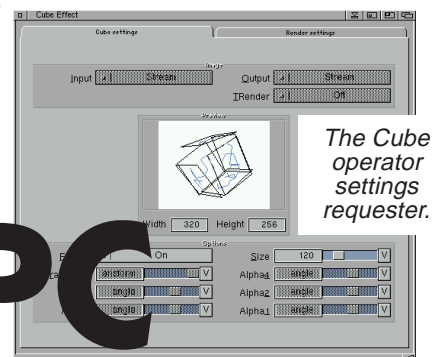
Developer: WK Artworks
Distributor: Eyetech
Tel: (01642) 713185
WWW: www.eyetech.co.uk
Price: £99.95
Demo: Available on Aminet: biz/demo/Wildfire7_Demo.lha

which creates 3D effects from parametrial functions (don't worry a variety of examples is supplied, I don't understand what they are either), which results in some weird abstract shapes. Water and Waves3D will render your frame as if it were on a rippling lake, there's even a 3D text generator.

Almost all the settings for each operator can be animated. Each operator has an options window controlling its output, all the operators are very flexible and seem to have all the options you can think of. Each option that takes a numerical value has a "V" gadget next to it standing for variable. When you click this, the Variable Select window appears which allows you to define how this value will change over the course of the animation. The variation is defined by a curve so you can have an effect which starts slowly and gets faster and faster over the animation. When you define a curve it is listed as a variable in the select window so you can pick it again for another option, keeping it in time with the first, even one in a different operator.

To give an example of the use of variable, all the 3D effects have a page of options which controls the viewing angle. You could assign variable to the X and Y rotation settings and have your 3D object spinning on those axes at just the speed you want, meanwhile another effect could be taking place, for example the texture on the object could be changing, this could be in time with the 3D movement, or at whatever speed you want.

So we've talked about the fantastic effects you can achieve with Wildfire but how are they put together? Two options are offered, which you choose on the first tab of the interface while set-



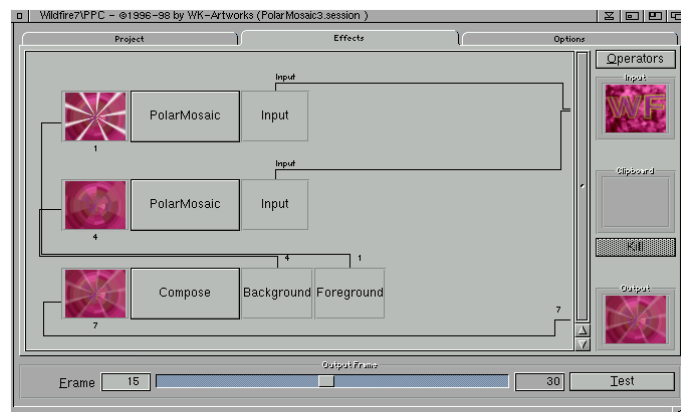
ting up your input and output options:

Linear Effect Editor

In the Linear mode the effects editor is a list view into which you drag operators from the Effect Plugins window. The list shows the effect name, what input(s) it will get its data from and where the output will be sent. Also shown is the range of frames the operator will be applied to. Double clicking on an entry brings up the options window for the particular operator. You can use drag and drop to alter the order in which the operators are applied. A preview window can be opened which shows the output of the list of operators at the current frame set by a slider at the bottom of the window. The preview is updated as you change the operator options or order, which is really cool except it can introduce severe lag in the GUI with more complex effects.

Non Linear Effect Editor

The non linear editor is not quite as flexible as the linear editor but it works in a more graphical way which is easier to understand and experiment with. Each operator is shown as a box with sections for the inputs it needs and a thumbnail preview of its output. You can make the output of one operator the input of another by dragging the output thumbnail of one operator onto the input box of another. This relationship



The Non Linear effects editor.

between operators is then shown by a line drawn from the output to the input. On the right hand side of the Non-Linear editor are boxes containing the initial stream input which can be linked into the input of one or more operators (again by drag and drop) and another Output box which you linked from the final operator. At each stage the operator thumbnail shows the effect of all the operators applied up to that stage which allows you to see exactly what difference any changes make at each stage of the process.

One major benefit to this method of working over a standard image processor is that you can save the current project as a "session". Sessions can then be loaded and applied to a different input stream at another time, you don't have to remember all the steps or remember to record a macro.

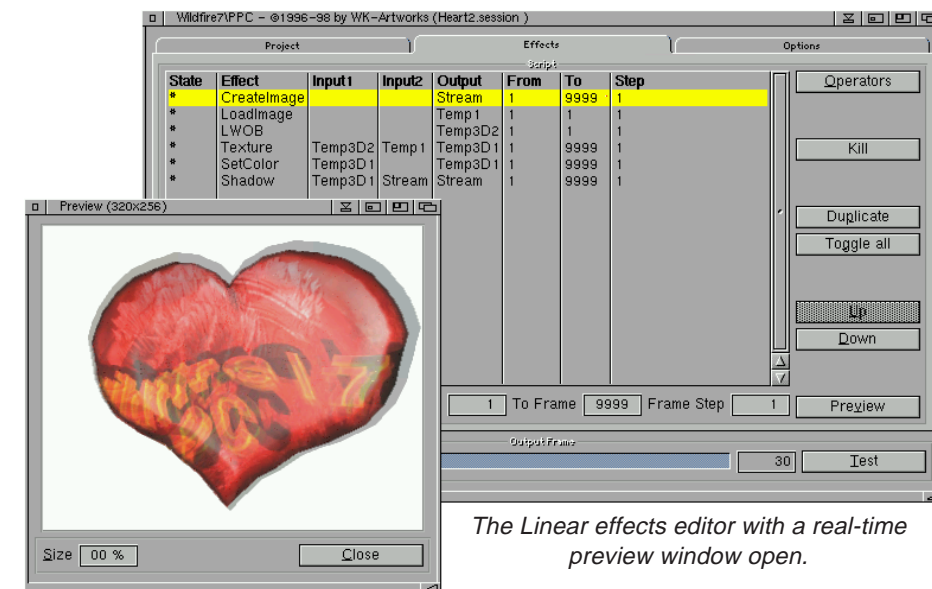
This all sounds pretty complex, and in fact it is hard to take in everything Wildfire has to offer and not become overwhelmed by the number of options. However Wildfire is supplied with the best range of example tutorial material I have ever seen with an Amiga program. There are literally hundreds of example projects demonstrating how most of the effects can be used. All the operators which support loading settings seem to be supplied with a good selection of defaults to get you going to. It's obvious that the authors of Wildfire really love the program and use it themselves.

File Formats

Loaders are supplied for ILBM (IFF), JPEG, PPM and PNG images and YAFA Quicktime, AVI, MPEG-1, MPEG2 and IFF animations. Datatypes are also supported for image loading so most bases should be covered. Single images can be saved in all of the loadable formats plus EPS. Animations can be output as MPEG, YAFA and IFF anim, each saver has a wide range of options so you can get just the quality to size ratio you want. YAFA is a special animation format supported by Wildfire it is very flexible (now there's a surprise :)) allowing animations to be tailored to the system they will be displayed on, it is possible to create full screen animations that will playback smoothly on quite basic Amigas as well as ones optimised for playback on graphics cards.

Hardware

To run Wildfire you must have at least an AGA machine with an '030, FPU and



The Linear effects editor with a real-time preview window open.

8Mb of free RAM. Wildfire is pretty memory hungry, working on full video or higher resolution images we occasionally ran out with 32Mb, on a 64Mb system we had no problems at all. An '030 will just about handle the simple 2D effects but you as soon as you get into the more complex effects the more processor power the better, Wildfire fully supports PPC boards and many effects preview almost in real time on a PPC based system. The 3D effects are particularly processor intensive, the documentation recommends an '060 or PPC system if you are using them intensively and I would certainly agree. A graphics card is also very helpful as Wildfire uses a multi-window MUI interface with lots of thumbnails. The additional screen space, more colours and higher speed offered by a graphics card screen make a big difference.

Documentation

The main documentation is supplied as a set of HTML pages which can be accessed through a simple built-in HTML viewer or a browser of your choice. The internal viewer is actually pretty good because it does not have lots of buttons, fast links and other clutter which is not needed just to view a help file. The documents themselves are quite comprehensive and use a tutorial style to introduce you to the different aspects of the program. While there is only a fairly brief description of what each individual button does and no detailed description of the various effects Wildfire does make extensive use of MUI's bubble help feature. A detailed description of each gadget appears if you hover your pointer over it. Unusually you can get bubble help about

the function of a particular window by hovering the pointer over a blank part of the window background.

Conclusion

Wildfire is great fun to use and you can achieve some fantastic effects quite easily. Once you climb the initial learning curve it is actually pretty intuitive but it retains a very high degree of flexibility. My only slight niggle with it is that the GUI can feel slow at times even on a fast PPC system because of the real-time previews. As a professional animation processor it succeeds admirably and provides great value for money. Wildfire screams out for the non-linear video editing systems which only just started to appear on the Amiga when the market started to shrink rapidly. For users of lower-end video systems Wildfire still has a lot to offer and the YAFA system gets a lot out of a standard AGA machine. Additions like the MPEG saver opens up use in Internet development too. It's even useful for general image processing and batch conversion operations. Although £100 is quite expensive for Amiga software at the moment I think Wildfire is well worth it if you have a use for the animation functions.

Results



wipeout 2097

Ever since I have had my PPC and BVision graphics card, my Amiga has been screaming out for something worthy of all this expenditure, having said that, I have course benefited from the graphics card immensely particularly when it comes to graphical programs such as Photogenics 4 etc, but what I really mean is something that will use the permedia 2 chips very capable 3D hardware acceleration. We (Amiga users) have in the last few years have had fun poked at us when it comes to games and in particular any 3D environment type games, well I can tell you we can now at last be in the same league. And the first game that has surfaced to use this technology on the Amiga is a Playstation favourite Wipeout 2097.

Installation

The game comes on a CD-ROM which has around 77 Mb of data on it, of which most is the game itself but also included is the Warp Up and Warp 3D systems that the game requires to run. To run this game you need a pretty beefed up system the minimum requirements are as follows, PowerPC processor, BVisionPPC or CyberVisionPPC or CyberVision 3D graphics card, 24Mb of RAM (32Mb or more recommended), CD-ROM drive, OS 3.0 (OS 3.1 or better is recommended), CyberGraphX or Picasso 96 (latest versions recommended), Warp Up V4, Warp 3D V2 and lowlevel.library for joypad support! If you meet these requirements (and luckily I



The initial options window.

do) then its time to install via the standard installer program, there are three different install options of small 1Mb executable only), medium (42Mb everything except MPEG movies) and full (70Mb) with options of icon types to use such as Newicons, Glowicons and bog standard 4 colour icons.

Once installed, when you run the game the PowerUp termination requester appears (if running PowerUp) so that WarpUp can take over. The options window opens which allows you to select various options such as screen-mode (I have found 640x480 to be a good balance between detail and speed), screen buffering which can be set to double, triple or window (triple buffering is smoother but uses more memory) but to show off to your PC owning mates run it in a window. Other options are for audio, you can choose to

use AHI (so it will take advantage of a 16 bit soundcard) or Paula (Amiga audio) and whether to play in game music from CD.

Playing

So the game itself then is a surreal 3D racing game in which the objective is to win funnily enough, but not just win but to kill your opponents at the

Mick Sutton reviews the game your PowerPC and BVision have been waiting for!

same time (attention Mr Schumacher). The craft themselves look a bit like super powerboats (F1) but are in fact zero gravity craft that hover just above the ground. As with most of these type of games there are power-ups to collect along the way such as weapons, speed up and energy shields etc... you get the picture! The cool thing is that when you pick up these items a voice over announces to you what you have just collected, and if you don't like the particular power-up that you have just obtained then you can dump it and collect a different one... cool!

There are two modes of play arcade and time trial with various options of track and vehicle type which sets the difficulty level. There are four teams that vary in ease of control such as the beginner ship which is easier to control but not as fast as the next level and so on. So far I have discovered six tracks but for all I know there may be more to unlock!

The game itself runs really quite smooth on my 240 Mhz PPC card with no noticeable slow up when the screen gets busy, even with all the detail options switched on! There are plenty of options if the game feels slow on your particular setup and the options are F1 toggle internal/external views, F2 mouse sensitivity, F3 draw distance (8 levels), F4 engine trails on/full & off, F5 sky on/off, F6 fog effect, F7 filtering (smooths out pixelisation), F8 gamma (8 levels), F9 linear or perspective texture mapping (linear fastest but pants to look at) and finally F10 dithering on/off, more options that you could shake a stick at.

The craft itself can be controlled via mouse, keyboard, joystick or joypad and several combinations of these too. I have found the best to be the joypad control because you can configure eight buttons for various functions and it is very handy having the shoulder buttons

Product Information

Developer: Digital Images
Available: Forematt Home Comp. & most games dealers
WWW: www.di-games.co.uk
Price: £30



for the left and right airbrakes for those tighter than a ducks arse corners. You will need to set up buttons for both airbrakes as mentioned, steer left and right, up and down (to an extent), throttle, drop weapon and launch weapon.

Oh and did I say that this game looks the dogs bollocks! With a super smooth animation to introduce the game, a good looking game control and preferences interface, it starts of very well and just

are particularly impressive and the vapour trails from the vehicles just look so cool.

The sound effects in this game are almost as impressive as the graphics with very cool tunes playing whilst you race, although these aren't the same as the Playstation (The Prodigy etc) version they are pretty damn good all done by the Psygnosis in house band! As on the PC version.

gets better as you load up the game itself. Each track is well designed and full of detail with nice touches like trains going over the track. The use of 3D hardware makes this look miles better than any previous 3D Amiga game, the weapons effects

Without doubt the best looking and sounding racing game on the Amiga and lots of fun to play too! It's one of those games where you say to yourself just one more go and suddenly find it's two o'clock in the morning, just a shame there is no two player mode or we would be up all night long! If you've got the hardware BUY IT NOW!

Results

Pros

Looks brilliant,
 Sounds brilliant,
 Plays brilliant!

Cons

High hardware requirements



FORE-MATT Home Computing

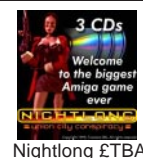
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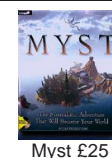
Heretic 2 £30



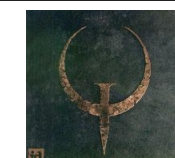
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Napalm £28



Myst £25



T-Zero £25



Wipeout 2097 £30



Simo £25



Whales Voyage 2 £15



Best of Gremlin £20



Beneath a Steel Sky

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Adventurers Lair.....£20	Eat The Whistle.....£10	Phoenix Fighters.....£10	Tales From Heaven.....£20	1500 WAV Snd Efx.....£10	Horror Sensations (18)....£10
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Black Viper.....£10	Giana Sisters Trilogy.....£10	Shadow of 3rd Moon.....£15	Ult. Super Skidmarks.....£10	CD32 Install Kit.....£15	PFS2.....£25
Blade.....£10	Goal! 2000.....£15	Shogo PPC (soon).....£30	Uropa 2.....£10	CybergraphX.....£25	Red Hat Linux.....£20
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Grand TV Amazing!

Gary Storm tries out this snappily named gadget now available at a bargain price.

Sick of "Eastenders" and "Days of Our Lives"? Get TV-Amazing and watch "Voyager" on your Amiga monitor instead.

As you'll read elsewhere in this mag, I was desperately seeking a VGA-PAL converter, to record 24 bit colour from the graphics card output to a VCR. At WoA '99 I spotted the TV Amazing being sold by Gasteiner, and it seemed possible that any beast that could convert PAL to be viewable on a VGA monitor, could do the opposite too. Gasteiner said it was possible too. Cool... it was mine.

The TV-Amazing comprises of itself (and power converter), a 3-way (kinky) video lead, remote control, and a very sparse manual. The manual isn't really needed (luckily), as it's very simple to whack together. Stick one end of the video cable in the back of your TV-Amazing, another into the gfx card or monitor output of the Amiga, and the final plug into the monitor input. Plug in the power lead, aerial, and batteries (supplied) into the remote... and away you go.

It's simply a case of pressing the TV/PC button to swap between um, oh yeah... TV and PC screens. While on the TV screen, press the 'update' button on the remote control, and TV Amazing will search through the signal spectrum and store the strongest signals to some of its 60 channels. When pressing up or down on the remote, TV Amazing will

skip any unused channels and get straight to the good ones.

Reception strength is obviously purely up to the area you live in, and the aerial you use. I bought a £15 portable aerial from Tandy, which, although funky-looking... isn't brilliant (unless you love snow). A signal booster is on the shopping list, as well as some cable and adaptor so I can run the cable-TV upstairs as well (although I'll be limited to having to watch whatever channel is selected downstairs).

TV-Amazing also has 2 other AV-inputs (AV-1 and AV-2... perfect for your video camera, or watching video's via VCR etc.), an S-Video input (S-Video is for better quality video, but doesn't have audio), and audio in and out. Each of these is easily selectable via the remote or the TV-Amazing itself. It came in very useful at a SEAL meeting where we played a WoA '99 video on Rob's 17" monitor. Much better than lugging an extra TV around. A brilliant bonus of the AV-1 composite input is that you can plug your AGA composite output into it, and when selected, displays those non-gfx card modes on your monitor... so TV-Amazing is a 'B-Mon' and scan-doubler in one as well (so it'll save you 40 quid at least). I reviewed T-Zero using this method... fantastic.

It's an excellent thing to have around when you want to watch some decent TV, or (more likely) you're waiting for that render/animation/CD-burning/downloading to finish.

The only problems I've encountered with this box of TV tricks, is that the video cable that connects to the Amiga monitor output is a tad short, which means the TV-Amazing can be a little awkward to get straight, depending on your set-up (not the end of the world though), and



Connections



Side View showing S-video and composite video inputs each with a set of stereo audio inputs.



Rear View showing DC power input, TV aerial input, computer audio input, audio output, VGA pass through (uses "Y" lead on the single socket) and composite video output.

that you have to unplug the audio lead to hear your Amiga sounds (if you're using the same speakers). Oh, also that from what we've tried so far it doesn't convert VGA to PAL, which is the main reason I bought it. Bummer.

However, that doesn't take away the fact that the TV-Amazing does exactly what it's supposed to do (and more), and it does it very well and very easily.

Results

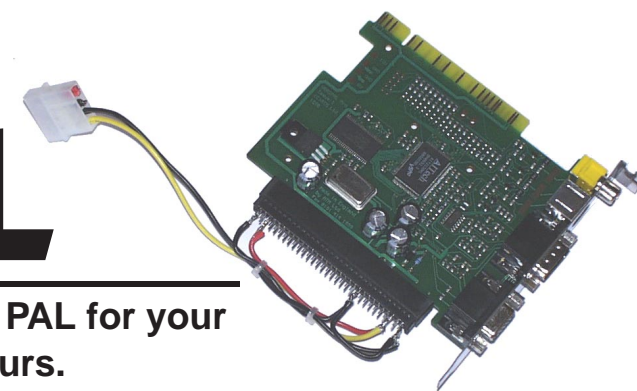


Product Information

Distributor: Gasteiner
Tel: (020) 8345 6000
WWW:
www.gasteiner.com
Price: about £50

VGA2PAL

Convert VGA from your graphics-card, to PAL for your TV and VCR... and keep the colours.



For the WoA show, I did my best (with much help from many sources) to get together material to edit for the production of a video to be shown. It came out OK, but nothing brilliant. The main reason was because the material was limited to demos (thanks a lot to Phillippe Ferucci and Julian Sadotti), and stuff I managed to grab from real videos made by IOM productions (Amiga videos) and Nova Design (ImageFX/Aladdin 4D promo video).

Grabbing normal video from the Amiga (via the composite port, or the monitor port if you have a SCART lead) is fine, but you're limited to 256 colours, and PAL resolutions. You also can't record any software that normally utilises the graphics card, without going through the hassle of changing each screen to a PAL mode, and going back to 8bit so that it goes through the normal monitor port. Pain in the ass, and doesn't show off the software to its full effect.

I would have loved to grab video from the graphics card, but I found out nearly all the VGA to PAL converters were PC only, as they relied on PC software. The cheapest non-software driven beast I found was £200. Geez!

A couple of months after the show, and luckily Rob discovers a converter in Maplins that doesn't seem to rely on any software... the VGA2PAL from Applied Technology. It was only £30 for the 640x480 version, and £80 for the 1280x1024/800x600/640x480 flavour. The only possible scuppering could be that it connected via an ISA bus.

Hmm. We knew we could power the board with a little bit of a fiddle with the ISA connector, but would the board want more than just the power?

WARNING: Please note if you decide to carry out this project you do so at your own risk. We cannot be responsible for any damage you may do to your equipment or, more importantly, yourself. While we have done our best to ensure the above details are accurate we are not responsible for any errors, we recommend you research the necessary information yourself and when you have built the project double check your work with a multimeter before connecting it up.

Ingredients

- 1x VGA2PAL card.
- 1x Power Splitter.
Maplin Part No. DG43W - £2.99
- 1x 8bit ISA connector (62pin edge).
Maplin Part No. JC03D - £1.45

Multimeter, soldering iron, solder, some wire, and a steady hand.

A little bit of research on the Internet later (The Hardware Book, <http://www.blackdown.org/~hwb/>), and we found the pin-outs for the ISA connector that we needed, telling us which pins chucked through which power. After inspecting the tracks active on the ISA slot on the VGA2PAL, we were happy to find that it only needs ground and +5 volts. Phew... full steam ahead then.

We then needed to find out what power the wires on the power splitter were. Eventually we found the reference material at an Amiga site in Canada (www.nationalamiga.com). A quick call to Mick, and he rushed over to do the deed. Before he did that though, he soldered (with a little difficulty as the pins are so small, and we went cheap by cutting and using the thick wire from the unused bit of the splitter. Mick did cut half the diameter of the wire out though, to make it slightly easier) the relevant powered wires from the splitter to the associated pins on the ISA connector. Doing the Earths was a little harder, as there were three, and they all had to be connected. Some deft cutting, bending and soldering was required, and Mick did the trick (if messy by his standards).

It's at this point that we powered the ISA connector, and Mick tested the voltage of his handiwork with a multi-meter, to double-check the power supply. Lucky

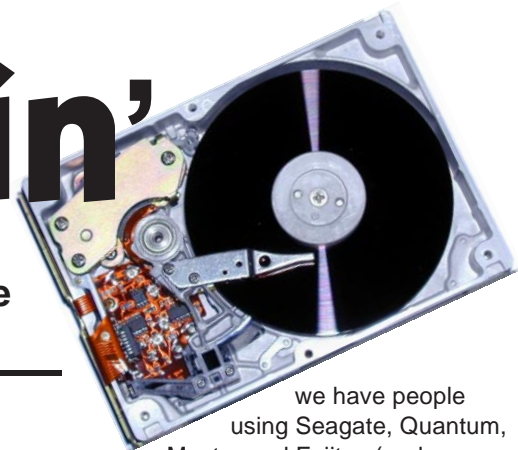
we checked, as the VGA2PAL would have been FRIED2FUCK, as we found out that National Amiga had it backwards on the +5 and +12 power front from the splitter. DOH! To save having to do it all over again, we took the power-splitter's head apart, and swapped the red and yellow wires around... which is why you see that the red wire is a +12V, and the yellow wire is the +5V in this case. Slightly backward, thanks to a certain misinformation.

Anyway... Mick cleaned up after doing the dirty deed, and we tested out the beast in Rob's A3000 via his graphics card output to the TV. And it worked! Well, actually, it kind of worked. The VGA2PAL is supposed to be able to convert the 1280x1024 mode, but... we don't think so! Couldn't get that one going at all, although it was great in 800x600 and 640x480 modes... 24 bit colour on your TV, ready to be recorded for your video masterpiece. Fantastic! I e-mailed Applied Technology about the missing mode but they didn't reply.

Rob's only gripe (apart from the non 1280x1024 mode... which to be honest, isn't totally necessary, as you'd want to use 800x600 at the most. Any higher than that and the PAL recording will be pretty blurry as it has to squeeze the VGA mode down to PAL's 640x480 anyway), was that his monitor display was a little blurry with the VGA2PAL in control. I didn't have this problem at on my 1200 though. My only duh! for VGA2PAL is in the 2m VGA pass-through lead that's supplied, as it's way too long for a video signal to retain its clarity for recording. The best thing to do is to go to Maplins, buy the two ends and some decent cable, and make up your own high-quality video lead.

Ultimately, the VGA2PAL is an excellent solution for video-makers who want to get the best quality output from their graphics card equipped Amigas.

Hard Drivin'



A hard drive is essential for any Amiga user, Robert Williams investigates which drives can be used and walks you through setting one up.

This feature is designed to help you choose and install a hard disk in your Amiga. Because this is quite a complex topic I have decided to cover it in two parts, this first one explains the basics of choosing a drive, and preparing it for use. Next issue I'll go into more detail on dealing with large drives and alternative file systems.

Choosing a Hard Drive What Interface?

The most commonly used Amiga these days is the A1200 which has a built in IDE interface, this allows you to use almost any IDE (also known as ATA) or EIDE hard drive. IDE hard drives are generally cheap to buy and simple to setup, however the A1200's built in IDE is slow compared to more modern interfaces and most SCSI implementations. SCSI (Small Computer Systems Interface) can be used for connecting a variety of devices, including hard drives, to a computer. There are various SCSI controllers available for the Amiga, these range from similar in speed to the A1200's IDE to many times faster. If you have a SCSI interface on your accelerator or a Zorro III SCSI card it will almost certainly be much faster than the built-in IDE. SCSI hard drives are

generally much more expensive than similar sized IDE drives and are a bit more complicated to setup, if you have a good SCSI interface you will have to decide if the extra speed is worth it.

What Size?

Articles of this type always used to recommend you buy the biggest hard drive you could afford, however with 20Gb IDE hard drives now going for less than £150 this is no longer the case. There are two reasons behind this, firstly most Amiga programs and data files are smaller than their PC counterparts so most people just don't need a huge drive. Secondly out of the box the Amiga cannot utilise drives bigger than 4Gb. So I would suggest that unless you need huge amounts of space save yourself a few quid and go for something around the 4Gb mark, you may find drives this small are just not available, if that is the case you can still use a bigger disk but only partition 4Gb of it. We'll have more information on using hard drives bigger than 4Gb in the next issue of Clubbed.

What Maker and Model?

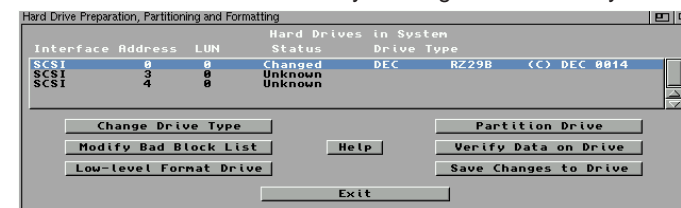
There are six or seven major hard drive manufacturers all of whom now produce pretty good reliable drives. Within SEAL

we have people using Seagate, Quantum, Maxtor and Fujitsu (and probably others) drives with no problems. Each maker has a range of models at different speeds and price points. To be honest most Amiga interfaces won't come anywhere near exploiting the full speed to even the cheaper drives so don't spend extra on a high performance model unless you have a fast SCSI or IDE interface (more on those next issue).

IDE drives all use the same 40 way connecting cable and are backwards compatible so you can just get any drive which takes your fancy.

SCSI drives are a bit more complicated, all the standards are backwards compatible so you can buy a SCSI III or Ultra SCSI drive and attach it to an old SCSI I controller. However there are also narrow and wide versions. Wide SCSI uses a 68pin connector, the only Amiga controllers which uses this are on the Phase 5 CyberStorm PPC and MkIII accelerators, all other Amiga controllers use 50 pin narrow connections. You can buy adaptors to connect a 68pin device to a 50pin bus but these can be quite expensive (£15-20).

4, HDToolBox will then search the interface you selected, when the search is completed a list of Hard Drives in System is shown. Look in the list for the drive you have just added, it will be listed as Unknown in the Status column and will probably have the manufacturer's name in the Drive Type column. Select the new drive by clicking on its list entry.



5, Now we need to get the information on the size of the drive, with the new drive selected click on the Change Drive Type button. On the Select a Drive Type screen click Define New (NOTE leave the Drive Types: cycle gadget set to SCSI even if you are installing an IDE drive), then on the Define a New Drive Type screen click Read Configuration. This will read the details of the drive. If your drive is greater than 4.3Gb versions of HDToolBox prior to 3.5 can show a small or even negative value for Size:, ignore this it is a display glitch and will not cause problems.

6, Once you have read the configuration click Ok twice to get back to the main screen. Now with the drive still selected click on the Partition Drive button. The Partitioning Drive screen appears where you can define the partitions on your drive. At the top of the window the long bar represents the capacity of your hard drive, it is split into sections showing the partition sizes, by default there are two equal sized partitions.

IMPORTANT NOTES: Unless you are using a file system and device driver that supports it you cannot use more than 4Gb of space on any hard disk. 4Gb is 4096Mb so if your disk is bigger than this make sure the total size of all your partitions is less than 4096 Meg (I would leave a few Mb spare to allow for rounding errors). It is good practice to make partitions 2Gb (2048 Meg) or smaller as this is the largest file size allowed under the Fast File System.

7, Alter the partition sizes by clicking on the partition you want to change then drag the arrow to get the size you want. To add a new partition, size the existing ones to clear some space, then click New Partition and finally click in the space you want the new partition to occupy. To delete a partition click on it then press the Delete Partition button. NOTE: No changes are made to the drive until you Click Ok and then Save Changes to Drive on the main screen so don't worry if you make a mistake at this stage.

8, For each partition you have created you need to alter the settings, for this click on the partition then check and if necessary alter the following options:



Partition Device Name: This is a short identifier for the partition (you can give it a more descriptive volume name later). Usually the first partition is called DH0 (Disk Hard Zero) with

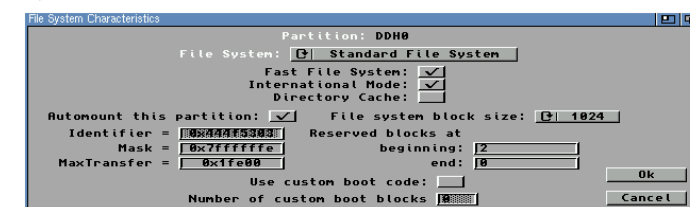
the others following on in series (DH1, DH2 etc.) New partitions you add will be called CHANGE_ME by default, make sure you do, also check you don't have two partitions with the same name.

Bootable: If you want your Amiga to boot from a partition make sure you check (click on the box to put a tick in it) the Bootable option, usually just one partition would be bootable and this is where you install Workbench.

To get the best performance and avoid some potential problems it is a good idea to alter some of the advanced options. To do this click on the Advanced Options check box, extra settings appear in the window.

Buffers: This is an area of memory that the file system will use to speed up hard disk access, each buffer used some memory (512bytes by default) so the default 30 buffers is only 15Kb. If you have a reasonable amount of memory it's a good idea to increase this value to at least 100 (50Kb).

File System: Change: Click this button to get a page of file system options:



Max Transfer: The default value of 0xfffff can cause problems with some IDE hard disks (files become corrupted when you copy them) so it is wise to always set this to the lower value of 0x1fe00.

File system block size: Setting this to 1024 from the default of 512 will considerably improve performance particularly on deleting files.

Once you've finished setting the file system options for a partition click Ok to get back to the Partitioning screen.

9, When you have checked these settings for ALL the partitions on the drive Click Ok to get back to the main screen, now click Save Changes to Drive to do just that, a warning requester will come up if you had any existing partitions on the drive which will be destroyed. Click Ok if you're happy, then HDToolBox will ask you to reboot your system, make sure nothing else is running, ensure the Install disk is still in the drive then click Reboot.

10, Once the system has rebooted you should see an icon on the Workbench for each of the new partitions you created each of these partitions needs to be formatted, just like you would do with a floppy disk. So click on each icon, select Format disk from the Workbench Icon menu. In the format requester enter a name for the partition (this is usually a descriptive name relating to what you will use it for). If you don't use it you can switch off Put Trashcan, switch on Fast File System and International Mode, DO NOT switch on Directory Cache for hard disks.

11, When each disk has been formatted you can begin to use them as any other disk. If you want to install Workbench on to one of your new partitions open the Install drawer on your Install disk and run the installation in the language of your choice. Remember to install onto the partition you made bootable, the installer should select this automatically.

Preparing a Hard Drive Tutorial

This tutorial will guide you through installing a new hard drive on your Amiga. It assumes you don't currently have a hard drive installed, or you want to start from scratch by installing Workbench on your new hard disk. If you are adding an additional hard disk to your Amiga follow the steps from number 3.

1. Install the new hard drive physically in your Amiga, then insert the Install disk in the floppy drive and turn the machine on. Within a few seconds you should see a grey Workbench screen with an icon for the Install disk.

2. Open the Install disk by double clicking on its icon then open the HDTools drawer in the window that appears. In the HDTools window you should see an HDToolBox icon. Now double click on the Ram Disk icon which should also be on the Workbench. Move the windows so you can see both the

HDTools and Ram Disk windows then drag the HDToolBox icon to the Ram Disk window, the file will be copied.

3. If your new hard disk is connected to the Amiga's built-in IDE (or SCSI if you have an A3000) interface simply double click the HDToolBox icon to run the program. If your hard disk is connected to a different interface you need to tell HDToolBox where to look for it. Click once on the HDToolBox icon in the Ram Disk then choose Information from the Icons menu. In the tooltypes section change (or add if it's not there) the line SCSI_DEVICE_NAME=mydevice.device where mydevice.device is the name of the device driver your hard drive controller uses. This name should be in the documentation for your controller, we also had a list of the more common ones on page 16 of Clubbed issue 4. Once you have this set correctly click Save in the information window then start HDToolBox.

Back to Basics

3.1: Introduction to the Shell

What scares inexperienced Amiga users but is actually quite warm and friendly when you get to know it? The AmigaDOS shell of course, Robert Williams abandons analogies to find out more...

The shell gives you access to the Amiga's command line interface. This is another method of controlling the Amiga which, unlike the Workbench, uses text commands rather than windows, icons and menus manipulated with the mouse. One of the nice things about the Amiga is that you can use any combination of the shell and Workbench that you like, you may find some activities are easier from a shell and others from the Workbench. If you install KingCON the shell is even better integrated with the Workbench.

Opening a Shell

Double click the Shell icon in the System drawer of your Workbench partition.

To open a new shell window from an existing one or from the Workbench Execute Command requester type new-shell and press return.

Command Lines

In a shell window you type a command line and press enter to perform an action. A command line consists of three parts, the command, its options and arguments. A command is a program, stored either in ROM or on disk, which performs an action. Arguments are additional information required by the com-

mand and the options tell the command exactly how you want the task performed. Here is a typical command line:

```
list ram: DIRS
```

Where list is the command, ram: is an argument, in this case the directory to list and DIRS is an option telling the command to list only directories.

When you enter a command the Amiga looks first in the resident list, this is a list of commands available in ROM and any loaded into RAM using the resident command. To get a list of all the resident commands enter the following in a shell:

```
resident
```

If the command is not found in the resident list the Amiga looks in a list of directories called the search path, this is set using the path command. Enter:

```
path
```

to see a list of the directories on the search path. Notice that the current_directory is listed at the top of the search path so a command there will be found. Most commands (including 3rd party ones not supplied with the OS) are kept in the C: directory, enter:

```
list c:
```

to see a listing of all the files in your C: directory.

WARNING!

Some of the commands listed here are potentially destructive, the nature of the shell is that they don't usually have the "Are You Sure" messages most Workbench commands use. For example the delete command will delete the file you specify as soon as you press Enter, take care to double check your command line before executing it. If you're not sure which files a command will effect try using the same path (and the ALL keyword if needed) with the list command.

Getting information about a command.

Almost all commands contain some information about how they are used, this can vary from a rather cryptic line listing all the possible options to quite a verbose text. Most commands written specifically for the Amiga will give you this help if you enter them with a "?" as their only option, for example entering:

```
dir ?
```

```
returns
```

```
DIR,OPT/K,ALL/S,DIRS/S,FILES/S,INTER/S:
```

Another common type of 3rd party command are programs ported from Unix and similar systems, with these the -h option will usually get you some help:

```
gzip -h
```

```
returns
```

```
usage: gzip [-cdfhlLnRtvV19] [-S suffix] [file ...]...and a list of all the options with a description.
```

The information returned by Amiga style commands follows a standard format called the command template. A list of keywords is returned each representing an argument or option. The keywords are separated by commas and each is followed by a letter (or letters) identifying how it is used.

/A This argument is always required.
/K You must precede this argument with its keyword.
/S This option is a switch, if you specify it the function it represents will be active.
/N Argument is numeric, a number.
/M Multiple items are accepted for this argument.
/F This must be the final argument on the command line.

If you type the arguments in the template order you do not need to specify their keywords, just the value you want to use (unless the keyword if followed by /K). If you do specify the keyword before the value for all the arguments you can type them in any order you choose (an argument followed by a /F must always be the last on the command line).

Common Commands

There are many AmigaDOS commands and each one has many options, there's no way I could cover even one or two commands in depth here. Therefore I have chosen three useful commands and mentioned their basic usage, I hope this will encourage you to grab an AmigaDOS book and learn more.

list

This complex command allows you to list the files and subdirectories within a directory or volume. Its most simple use is list <directory> for example:

```
list sys:
```

Paths

One of the concepts you need to understand before using shell commands is that of paths. The path to a file is the full list of the drive and all the directories you need to go through to get to that file. The volume name is followed by a colon (:) and each directory is followed by a forward slash (/). So the path to a file called test, within a drawer called Documents which is within a drawer called Files on a volume called Work would be:

```
Work:Files/Documents/Test
```

This is called an fully qualified or absolute path, it tells you exactly where the file is. To save some typing you can also use a relative path in the shell, this describes where the file is relative to the current directory. By default the current directory is shown in the prompt, behind a ">" symbol, entering cd alone will return the current directory. You can change the current directory by entering:

```
cd <path>
```

Taking the example file above again of the current directory were Work:Files we could refer to our document as:

```
Documents/Test
```

Which will list all the files in the root directory of your boot partition.

Useful options include:

SINCE <date> Allows you to list only files created or modified after the specified date.
ALL List scans all the sub-directories of the specified directory.
FILES Lists only files.
DIRS Lists only directories.

Example:

```
list sys: ALL SINCE yesterday
```

Lists all the files and all the directories in your boot partition which have been modified since yesterday.

assign

Controls the assignment of logical device names to target directories or files. Assigning a logical device name to a directory or file with a complex path allows you to refer to it more easily. Installers often add assign statements to the start-up files so the program can find its data files. Entering assign alone will list all the volumes, assigns and devices available on the system.

Useful options include:

ADD Adds an additional target to the assign, both targets will be searched for a specified file.
REMOVE Deletes a target name from the assign list.
DEFER This option creates a late-binding assign, this means the logical device will not be created until it is specifically requested. The DEFER option can be used to prevent logical devices cluttering file requesters etc.

Example:

```
assign MyProject:
Work:Files/Documents/Project/
```

This command line assigns the logical device name "MyProject:" to the specified directory. Picking "MyProject:" in a file requester's volumes list would take you straight to that directory as would entering cd MyProject: in a shell.

delete

As you would expect this command deletes the specified files from disk, this command does not give you any warnings so be careful when using it.

Useful options include:

ALL Scans all the subdirectories within the specified directory for files and directories to delete.

Example:

```
delete ram:test ALL
```

Deletes the directory test in ram: and all the subdirectories and files within it. If test were a file or an empty directory the ALL keyword would not be required.

Using the Shell

The shell has various short cuts that make entering commands easier, firstly there are a full set of editing functions. You can use the left and right arrow keys, back space and delete as you would in a word processor to correct any errors you make. There are also plenty of special editing short cuts, here are some of the most useful:

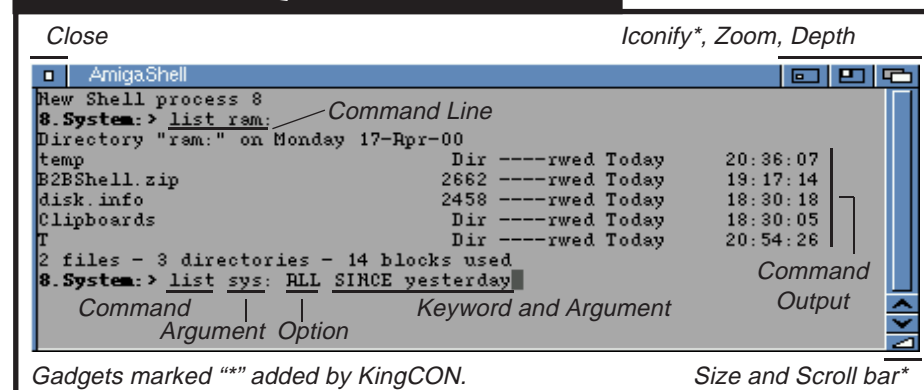
Ctrl + X Clears the command line.
Ctrl + K Deletes everything from the cursor to the end of the command line.
Ctrl + U Deletes everything from the cursor to the beginning of the command line.

Probably the most important time saver is the history feature, pressing the up arrow on your keyboard will recall the last command you entered, keep pressing up to step back through the history of commands you executed this session. Once you have recalled a command similar to the one you want to execute you can edit it then press Enter to execute.

KingCON

While the Amiga shell contains a lot of nice features and is far better than DOS on a PC there's plenty of room for improvement. KingCON gives your shell window far more features and is especially useful as it integrates with Workbench. As KingCON was reviewed in Clubbed issue one I won't go into too much detail here however it's key features are a scroll bar which allows you to scroll back through long command outputs, Tab file completion which completes the current file name when you press tab or presents a list if there are multiple matches and drag and drop support so dropping a file icon onto the shell window inserts the icon's path at the cursor position on the command line.

Anatomy of a Shell



Cinema4D Tutorial

By Robert Tiffen

This tutorial will be primarily based on the Cinema 4D package. This is simply because; everyone has got it (it's been on several cover disks), it was very inexpensive, it's very easy to use and extremely versatile. What more could you ask?

Well what shall we create? Something straightforward and based around South Essex Amiga Link. I will not be covering menu's in detail, just the ones we need to fiddle with. I have tried to write this as though you are not in possession of the manual. As I assume you would not need a tutorial if you were. The C4D manual is very clear and has some excellent tutorials. This should be enough to get you started with most projects. So I thought a picture of an old fashioned scroll of paper with an equally old fashioned wax seal at the bottom in close-up, just to save unnecessary clutter and so as to see detail.

First set-up your editor preferences to your own specifications (Menu Project/Settings/Editor Preferences). From here select a screen mode that you prefer, Mine is just high res, but choose a 256 colour mode. If you do choose a different screen mode i.e. a laced mode then the layout of certain things will also be different, in particular the icon strip on the left, and you may have trouble keeping track of icons I mention. You will need 256 colours for the material



manager. I find it helpful to be able to get an idea of what objects will be like when rendered. OK. So it uses more of your chip ram. If your project is getting close to your maximum memory then you may not have enough to render it and reducing screen colours won't make much difference. But this is where C4D has an advantage over other packages in that there is a separate rendering utility. Also from the Editor Preferences you can untick the workbench box to switch it off or you could run C4D on the workbench screen by selecting it in the screen mode requester (first item). Once everything is set up the way you want, just save the settings.

You should now be on the main C4D screen. On the right is a large window, probably named untitled. On the left is a window filled with icons, the eye, P, right arrow and XYZ are already selected. The selected P icon denotes which view you see in the right-hand window. XY, XZ and ZY are flat views of your scene P is the perspective view from the camera i.e. this is the finished view, the one which will be rendered as the final picture. If you just need to view the scene or objects from a different angle temporarily then use the 3D icon. You can move in this view as much as you like without affecting the result of the way the perspective/camera view is set up. If you find you like how the picture is setup in the 3D view you can transfer the camera information by selecting Camera/3D to Perspective from the Extra menu and vice versa.

A quick word about menus, some menu items have a full stop after them, these have default values but can be changed. Just hold down a shift key and select the menu item, a requester will pop-up with the values that can be altered.

Table Top

Now back to our project. First we need to create a table top type object. So select Objects/Primitives/Plane. You can also use key combinations, if you prefer, for a lot of menu items, the Plane key combination is ALT+7. If you have done this, you will now have a simple flat surface in the perspective

view. You will notice that it has several segments i.e. it is a plane made up of several smaller planes. If you can't see it very well, then zoom in by clicking and holding the right mouse button over the magnify icon in the tool bar and choose Active Object from the pop-up menu. Now all these extra squares take up extra memory in the computer and on disk. Because 3D can be very memory intensive it is a good idea to get into the habit of using the simplest objects possible, so delete the plane by pressing Del on the keyboard and start again. This time hold down the shift key while selecting Plane to get the requester up. The last two items, width-segments and depth-segments are set to 12 each thereby in fact giving you 144 squares. Left click in each box and change the settings to 1, now click OK and the new simple plane appears. If you fancy trying to save both of these objects you will find the preset version about 3 times the size of the adjusted one, so don't always accept the defaults the software offers. You can save yourself a lot of grief by choosing Rectangle instead of Plane but it gets us used to using the program.

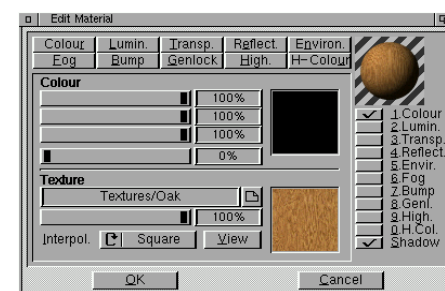
This square is going to be a table top. It will, for the sake of simplicity, and keeping memory requirements low, be our main backdrop and fill the screen. To this end, we should first of all enlarge the plane to make it more easily fill the screen. To do this the object needs to be selected. This is easy because this is our only object so far, and is already selected. Next the whole scene needs to be rotated. Make sure the co-ordinates gadget is set to World and Edit work area (Eye) button is selected. To rotate this left click on the Rotate button. Now left click and drag in the perspective window, the whole scene rotates in all directions. Aim to get the grid bars aligned with the screen vertically and horizontally as if you were looking directly down on your table top. This does not need to be exact. If you have trouble with everything rotating at once try deselecting two of the axes by left clicking in the Y and Z axes then rotate the X axis. Selecting one at a time until you have a passable vertical view. Our table top is a bit small so left click on the Object icon, you will notice the co-ordinates gadget change from World to Object. With the Object icon selected our actions will now effect just the currently selected object, not the whole scene. Next select the Scale icon, click and drag in the perspective window until our plane is a bit larger than the window so that you can no longer see the lines that made it up. But you can still see the axes.

NOTE When dragging the mouse in the main window to perform an operation like rotate or scale make sure the pointer starts in a clear area, if you click the central black dot of an object you will select it rather than performing the desired operation.

You may at this point wish to save this to disk just in case. Choose Save As from the Project menu, give it a suitable name then click OK. It is always a good idea to save periodically!

Our table top is a bit dull, even on a basic 1200 setup you should have enough memory with this project to give it a texture. From the Window menu select Material Manager and push the resulting window out of the way. Remember you must be running C4D on a 256 colour screen for this to work. Then from the Material menu select New and after a couple of seconds (on my 030 anyway) you will see a rather bland looking sphere called new in the material window. Left click the sphere to select it, indicated by the word new turning red. Then right click over the sphere and select Rename and in the Name box type Wood, Table or Top or some such, so as to easily identify it later. Now right click the sphere again this time selecting Edit.

In the Texture section at the bottom of the resultant requester click on the file requester icon and locate a suitable wood texture. You could make one in a paint package, DPaintV being excellent for this, or find something on a cover CD or possibly disk. If you have Cinema4D from CUAmiga CD 27 try Oak in the Textures drawer. The image you have chosen should now appear in the preview window just to the right of the file gadget. Drag the bottom slider in the colour section down until the texture looks good (you can



The Material Editor with the settings I used for the table top.

also drag the other three to tint the texture) in the example sphere at the top of the requester, I dragged it right down to 0%. When you're happy click OK. Now our texture is ready we have to assign it to the table object, as the table is still selected right click on the Wood sphere in the Material Manager and choose Assign.

TIP If you purchased the full CD edition of Cinema4D then go to the Material/Load menu then select WOOD.C4D in the Bonus/Materials drawer. You will then have more wood textures in the Material Manager than you can shake a stick at. I used SPRUCE.01 from this plethora.

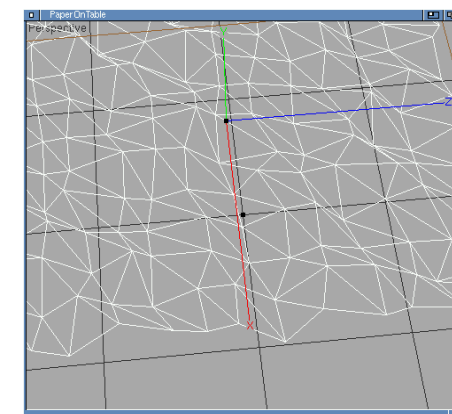
Now is a good time to do a quick render. If you look at the render icon on the button bar you will notice it has a small black triangle at the bottom right corner indicating further selections with the right mouse button. So right click on it and select Scanline from the pop-up menu. In the Scanline window make sure that Resolution is set to 1/1 Pict. and Aspect ratio is set to 4:3. Then click on the Screenmode button at the top and choose a fairly low resolution screen with 256 colours for a quick render, I choose PAL-Hires, click on Render. A small window appears, you can click on Show frame straight away to see the image being rendered. After a few minutes, unless you have a fast processor, you will see your complete picture. Click the left mouse button to get back to the Cinema screen.

Now something isn't quite right, wood grain looks like it is bursting out from the centre of the plane. To correct this we need to tell Cinema what shape of object the texture is being applied to, the default is a sphere where as we have a plane. Choose Texture Bar from the Window menu, another tool bar appears, at the top left the sphere icon is probably selected, so click on the square (plane) icon also make sure the checker board icon is selected too. Now do another scanline render... much better, but to my mind I don't think the grain on the wood should run vertically. Click on the Work Area icon and

check World co-ordinates are selected. Then click on the Rotate icon, make sure the Y button is the only one selected. Now click and hold with the left mouse button in the perspective window and drag one way or the other. It does not matter which. Drag the mouse to rotate the scene 90 degrees. I have left mine so that it does not quite go the full 90, so as to have a more natural feel to the final result. Try tipping the scene away from you by deselecting the Y and select either X or Z. This gives the impression that you are sitting at a table looking down at it. Well that's the table top. Now something to put on it. A piece of paper!

The Piece of Paper

Another plane is needed so select Object/Primitives/Plane menu item, but remember to hold down the shift key. If you are following this tutorial in one sitting, then without holding shift down you will get your adjusted plane. i.e. a plane made of a single square, but we don't want that this time! So readjust the Width and Depth Segments boxes back to 12, because this time we are going to try and make this plane look like a of crumpled/folded paper. Firstly we need to re-size the paper so it looks right on the table so click on the Object icon. This is to select the object only, as we don't wish to enlarge the whole scene. Next select the Scale icon. Now

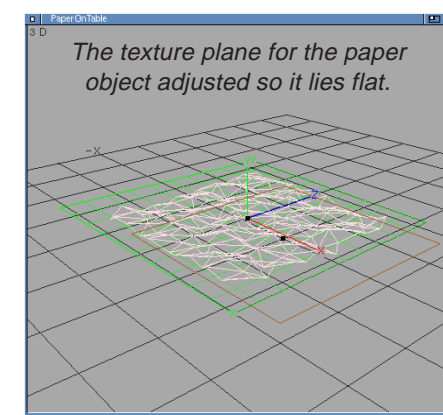


The paper object after the Crumple operation.

Texture Problems?

If your piece of paper or table top looks more like it has been tie dyed with streaks of colour rather than a texture you have hit a quirk of Cinema 4D rather than an actual bug. Somewhat disconcerting if you are a beginner to C4D all the same, as it is not what is expected. One would think that if you had a flat texture (it has to be said that textures are ever only 2D, otherwise we would not even need C4D) and a flat plane that C4D would stamp it down flat and not try to balance it on it's side, rather like trying to stand a playing card on it edge on a table. To get back on track press the 3D button in the tool bar, then zoom out so you can see the whole object. Now click the Texture Axis button and two things happen. One the plane that is our sheet of paper changes to the unselected colour and another plane appears. This other plane is our texture and as you can see bears little

relationship to the plane it is supposed to cover. In my project the texture plane is elongated and perpendicular to the central axis.

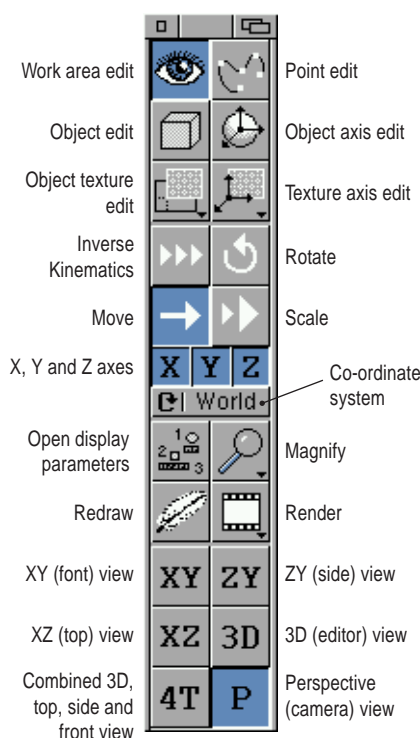


The texture plane for the paper object adjusted so it lies flat.

Have you got the Texture bar open? If not then open it. First left click on the centre right icon that looks like two intersecting lines with the angle indicated. Then left click on the icon just to its left that looks a bit like a screen suffering from pincushion effect with four arrows pointing at it. Now this texture looks a little more like it's covering our plane. Mine is was still not quite straight. I had to click on ROTATE in the left icon strip and twist it slightly around the Z axis and sort of flip it up around the X axis. There are also items in the Extra/Texture sub menu's that should, I would have thought, help but I could not get them to do anything.

I do realise that all of this is a little more complicated than would be ideal. So if you are having trouble with this I would re-read this box out and take plenty of time to experiment with the options, making several test renders to see the effect.

Tool Bar



I made my "sheet of paper" larger than the window again so as to appear to be in tight close-up, as I believe they say in movie making circle's. We could after all develop this into an animation and add sound. (crumpling paper anybody?). Anyway onward. The paper now fills the window, even overlaps a bit. Lets move it up just so that some of our nice table top spent so long on can actually be seen. Click the Move button and make sure only the X and Z axes are selected then drag in the window, so that we can see about 10 or 20 % of the table object below.

Now for something a little more exciting. Make sure the plane that is our piece of paper is still selected and that the Object icon is depressed. Then go to menu item Tools/Crumple and use the default setting.

Now what has happened is that half of the intersecting points that make up our plane have been lowered and the other half have been raised. But those that have been lowered are now below our table top and the others are above. A quick scanline render will confirm this. To overcome this switch to either XY or ZY view by pressing the appropriate button in the tool bar. Zoom in by right clicking on the magnifying glass icon and selecting Magnifying Glass from the pop-up, then drag a square around the table and paper objects. You can then see more clearly. Now make sure that only Y is selected on the axes section of the tool bar, Move should still be selected so drag the sheet of paper up so as to be slightly above the half way mark. Then do another quick render just to confirm that all is as it should be. I always do little renders like this as it is difficult to try and sort problems out once the project is finished. OK. You could leave your piece of paper as it is. To try to make the paper look more authentic we can add a texture. Again make sure that the plane that is our sheet of paper is selected and therefore drawn in white in the perspective window.

TIP It makes life easier if the objects are named, making it easy to find them.

From the Edit menu select Object Manager then click on Plane in the left hand list and change the name in the bottom string gadget to Table, press Return. The other plane should be called Plane.1 change that to Paper. Now close the Object Manager window.

From the windows menu make sure that the Material Manager and Texture Bar windows are open (if they are you may need to bring them to the front. Right click in the material window and select New to create a new texture as we did before for the table. This time Rename the texture to Paper. Edit the texture and choose a suitable image, I used Textures/Roughcast01.tif. Drag the bottom colour slider down to 35% to get a light papery texture then OK out of Edit Material. Now assign the Paper texture to the Paper object (just Choose assign from the pop-up).

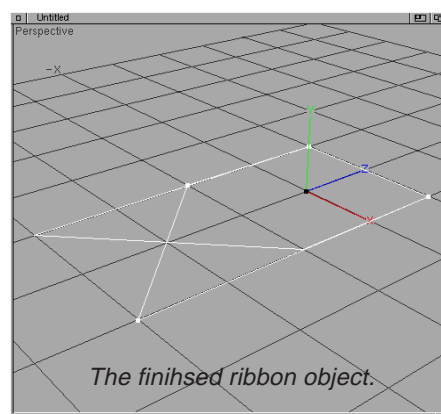
TIP I may as well take this opportunity to say that there is usually more than one way of doing most things in C4D, a nice feature! To make certain that the paper object is assigned to the paper texture open the Object Manager or just press V on the

keyboard, and click on paper in the left hand list and Material in the selectors on the far left. Another window pops up and paper should be highlighted there. If not make sure that it is.

Now lets make sure the texture is correctly applied, in the Texture Bar select the Square and Chequer Board icons. Time for a quick render. If your paper texture doesn't look right take a look at the Texture Problems box out.

Ribbon

Next to the seal, but not quite the seal itself. Our seal has to have a ribbon, this bit should be easy. You may find it easier to start a fresh project. Make sure you save your work first then close the perspective window. Now choose New from the Project menu. Right, we need a single segment plane, which you will be able to do now, won't you? Once you've created it choose the Edit Points icon in the tool bar. Having pressed this your previously selected plane will have changed colour and got dots at the four corners. Click on the Move icon as we're going to move one of the points, deselect the Y axis so we keep our plane flat. Click on either of the bottom corner dots and drag out to about the same amount as the original height. Make sure that one edge is straight following the black grid. Now create another plane and drag out the point in the same way but from the opposite bottom corner. It may look a little better if one "tail" is a little longer than the other.



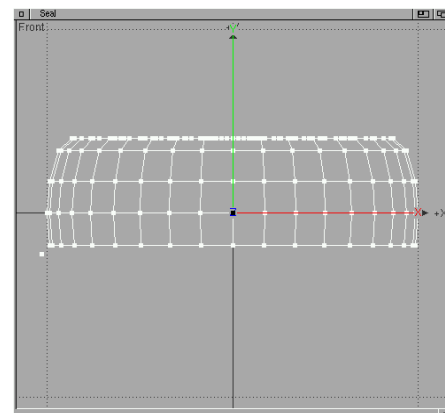
Now you should have a rectangle with an upside down V cut in the bottom. From the Edit menu choose Select/Group. Or more simply press G on the keyboard. The mouse pointer now changes to a cross hair, with this click and drag out a square around both objects. Similar to the Workbench multi-select operation. Now both objects are selected. From the Extra/Structure menu select Merge, the two "tails" become one. A little fat I think. Click the Object button and then Scale, select just the X axis. Now trim a bit of weight off.

Apply a nice fabric texture, again C4D CD has an excellent range if you have the full CD otherwise you could just choose a suitable colour. If the texture looks wrong when you do a quick scanline render sort it out following the Texture Problems box out as we did before.

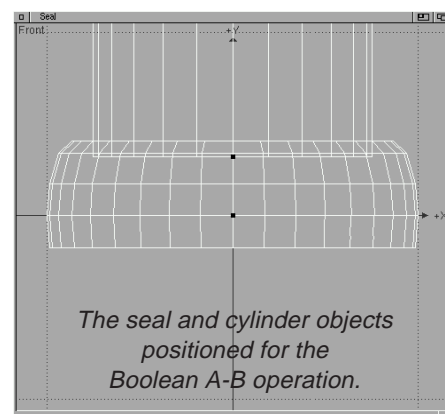
The Seal

So now onto the wax seal itself. Save the ribbons and start a new project. Start with a

Sphere from the Object/Primitives menu remembering to hold down the shift key. In the window click on Perfect Sphere to uncheck it. Then change the number of Segments to 36 and click on OK. Go to one of the side views (XY or ZY) and zoom in so that the sphere very nearly fills the window, or right select Active Object from the Magnify icon pop-up. Now click on the Points icon. Hold down the Ctrl key and with the mouse drag out a box to select all the points from the second row below halfway downwards. These now, all turn white. Press the Del key to get rid of them. You are then left with an overly voluptuous millennium dome shape (just for Gary). Then select all the points from and including the third row up from halfway to the tip. Now click the Scale button and Y axis only and align all the points so that they form a straight line in the side view. This gives us a flat top to our dome. Click on the MOVE button, select the Y axis only again and move this entire section down almost to the second row of points. You should be left with something looking like the screenshot:



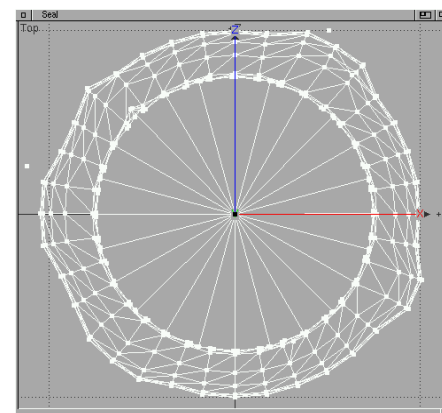
Now click the Object button to bring us back to our wire frame. Select Cylinder from Object/Primitives while holding shift down. Change Circle Segments to 24 and Radius to 75. Move the cylinder up in the Y axes to the point where the bottom of the cylinder is about level with the first section of points in the "dome". Now for the tricky bit (Have you saved?).



From the Tools menu select Boolean/A-B. From the requester click on Object A and another requester pops up, select Sphere. You may find this requester says Object Group in this case click on Object Group and you will find the Sphere. Then click on Object B and select Cylinder. Click on all the OKs

and a progress bar will give an indication of, well progress. Not very long even on my O30. Press V to open the Object Manager and you will see that you now have three objects, Sphere, Cylinder and Sphere-Cylinder. Delete all but the Sphere-Cylinder (ignore the camera) by clicking on them in the left list then clicking Delete on the left. A quick Shaded Display (remember to select 1/1 Pict. resolution and a suitable screenmode again) render reveals that we now have a sort of bulbous cup.

Select Merge from the Extra/Structure sub-menu, this makes sure everything is just one object rather than a top, bottom and sides etc. Now click on the Points icon and go to the XZ top down view. Holding down the Ctrl key click and drag a box around a couple of points around the circumference and one or two of the ones closer to the centre. Make sure to leave the central "well" alone. If you can manage to also hold down a shift key you will be able to make a selection and then add other points to it. We are using the CTRL key to make sure that points in underneath layers are also selected. With the move button selected and the Y axis unselected drag the points away from the centre (note you must drag in a blank area (not on a point) to avoid selecting or deselecting more points). You are then left with a bunion on an otherwise perfect cup. By selecting other sets of points in this bunion you can make it more round. Continue around the cup in this fashion. Some "bunions" could be bigger, taking four or five "in line" points around the perimeter.



Doctor, doctor my seal's got bunions!

What you are trying to achieve is a sort of paint splat effect. As paint is thinner than wax you don't want to go over the top. Try not to make it too uniform. Finally select Information from the Window menu. Click on the lower right button in the Information window until Parameter is displayed. Then at top left set Smooth Object to Yes then close the window. This is a good time to save and perhaps do a quick render.

Now for the really tricky bit. Go to the Window menu and open the Object Bar. Right click the top left icon which looks a little like and explosion, from the pop-up menu select Cinema Font. I hope you have installed C4D properly. In the font file requester select Isabelle.pfb from the Type-1-Fonts drawer (this is within the CinemaFont drawer on CUCD 27) and click OK. Then on the key-

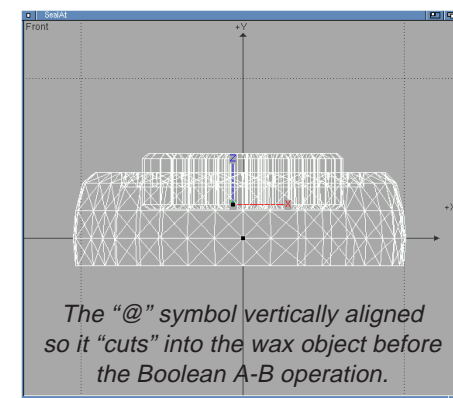
board type an "@" symbol. Press on Text in 3D to Cinema and in a few seconds you are returned to the main C4D screen with an Extrude Object requester. In this requester click OK, the requester should then reappear. Now click on Cover Surfaces and in the subsequent requester click on the two check boxes labelled Round and click OK. Now choose Contour Select, in the contour select window click on the first item in the right hand list and then OK. Back to the extrude object requester click OK again. After a short time the hole is defined. After a long while the rest of the object arrives. If you click on Perspective view you will see the large extruded "@" symbol, now choose Merge from the Extra/Structure menu select merge. I strongly suggest that you save this object now.

TIP If you have trouble with this last section try using the Crillee font. (I had some problems with C4D crashing after running CinemaFont, I found it helped if I saved as soon as the extruded "@" had been imported, then closed the project and re-loaded it, Ed.)

You now want the "@" object in the same plane as the seal, it currently is at 90 degrees to it. So rotate it then either enlarge the wax or reduce the "@", imagine you are going to stamp the "@" into the wax so that it leaves its impression. Move the "@" so it is central in the seal. This does not necessarily mean that the axis will be aligned. Once you have moved and scaled the extruded "@" you should be able to see an outline "@" symbol, this is called a path (it is not a solid object). This needs to be deleted, it is actually made out of two paths so select each one in Object mode by clicking on the centre of its axis (black dots at the bottom of the symbol) then press Del.

TIP If you have trouble selecting objects press W on the keyboard to get a list of objects in the project, click on the object you want then press OK. Notice the icons in the left hand column, the cube means an object, if you see a line with dots on it this is a path.

Next align the "@" vertically so that it is also cuts the bottom of the "cup" section of the wax. Now select A-B from the Tools/Boolean menu. In Object A put the Sphere- Cylinder and in Object B put the "@" and click OK. Half a minute latter you are left with another object this is called SPHERE-C-@, delete the other objects as we did before. This object should be made up of the bottom section of



The "@" symbol vertically aligned so it "cuts" into the wax object before the Boolean A-B operation.

the "@" and the wax. Try to imagine it as a solid object that if you were to pour a liquid in it would not run out of the bottom. Pay particular attention to the objects A and B in the boolean requester. If you have them the other way around to what I have described you will get a different result. You should then Merge and Optimise (Extra/Structure menu) the object this will reduce its size from about 62K to 54k, well worth it.

Well... white wax... I don't think so. Bring up the material manager and right click in it and select new. Then right click on this new material and select Edit. Click on Colour. Make the first or top colour 50%, the second 0% and the third 10%. On the boxes on the right select shadow and 9.High. Then on the selection boxes at the top click on High. Make sure Mode is set to Plastic. Then width and height set to 37 % and 16 % respectively. Now click OK and perhaps save again depending upon your confidence. While we have the wax selected set Smooth Object to Yes in the Information window (we have to do this again because the wax object with the @ embossed is actually a new object). Save your wax project and close it.

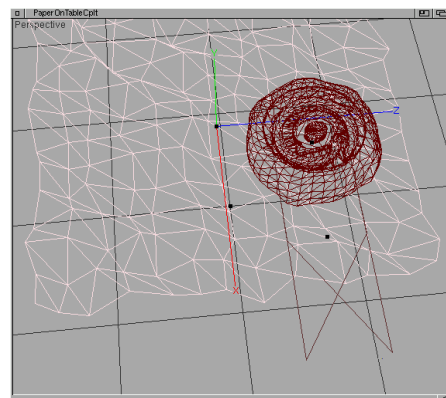
Putting it all Together

Well I think we are, at last, at the stage where we pull everything together and add the final touch.

Now choose Open from the Project menu and load the table top and paper project. Check that the paper is a smooth object as described above. Then use Project/Insert to load the wax and ribbon projects. If you saved the table top and paper in their final layout then just resize and reposition the other objects in the perspective window. The wax needs to sit well into the paper but the ribbon needs to be just proud of the paper yet it must not be visible in the "hole" of the wax. Save this with a different name so as NOT to over write our previous hard work, just in case things go awry. Time for the ubiquitous quick render. Everything OK?... Good.

Just one more little ditty to finish it off. Well if you've got C4D then you must have a version of PPaint. Load it up with the default settings and find a nice medieval font by right clicking on the "a" in the left hand tool bar. I used the sapphire font in the larger of the two sizes. Then select a nice "ink" colour. I used bright red, I don't think that was a wise choice. Anyway type in "http://seal.amiga.tn/" (Now http://www.seal-amiga.co.uk by the way, Ed.) and cut this out as a brush. Leave the background colour as it is. Save this in the C4D textures drawer as Seal.Text. Now go back into C4D.

Reload your completed project and open that materials window again. Hopefully for the last time, right click in the window and create a New material. Right click on that and rename it as "Text". Edit it, in the material window you will see that colour and shadow are ticked in the right hand column of buttons, also click on genl. In the top left of the window just below the buttons it should say "Colour" in bold writing, if it does not then click Colour in the button bank. All four sliders in this section should be over to the left. i.e. 0%. In the tex-



The final composition ready to render.

ture section underneath click on the texture file requester and load in the seal.text that you just created. After a short while the small preview window just to the right of the texture section will contain your brush. You may have trouble recognising it as such but not to worry it's there. You can also see a small representation in the top right corner. In the button bank at the top click on Genlock, again load your texture in the same manner as you did for Colour. Observe the small sphere top right, you can see your text wrapped around this. Notice that the background colour is the same as it was in PPaint. Now to get rid of the background, simply click on the background colour in the texture window to the right of the texture file

requester. This automatically sets the background colour in the Genlock section just above the texture section. The fourth slider should be set at about 10%. Your text should now be mapped onto a invisible sphere. Click OK. Select the paper in the perspective window by pressing "W" on the keyboard and select it from the list, clicking OK once more.

Now for another tricky bit, right click on the Texture Axis icon it and just above the wavy line it says paper or whatever you called your texture that you are using for the paper. Select generate new and paper or whatever you used appears again. Back to your materials manager window with your paper object still selected the paper texture button in the materials manager should appear depressed the others stand proud. Click on your text texture and that becomes depressed. Then right click on it and select assign. So what we have done is, assigned two textures to our paper. If you right click on the Texture Axis icon again and you should have the paper and text textures listed above that wavy line. If you have not it may be a good idea to load in the table top and paper objects from earlier on. You can then practice this again as I know from experience that it is fiddly to say the least. You did keep them separate didn't you? Finally add a light source from the primitives menu and position it toward the rear right and make it low and moody. When you're happy with the scene be sure to save the final version.

Now you're ready for the big moment, the final render! For this choose Raytracing from the Render pop-up menu. In the settings requester choose a suitable resolution and, if you want to display the image while it is rendered, set a Screenmode. Now click Render, in the Rendering progress requester you can click Show frame to view the final image as it renders. Once it has finished click Save frame to save the final image to a file (the format is set in the Raytracing settings requester).

That's it! what else is there to say! Well lots actually but I am running out of time.

I must just say that the hardest part for me originally was the "@" for the wax. C4D does not seem to be able to cut holes successfully. It is easier to use the Crillie font if you have the C4D CD. I believe that this is because C4D cuts the loop of the "a" better because there is a small gap at the bottom. This can be seen in Cinema Font. I originally used the font option in Imagines spline editor and converted it with Megacolon. I also found that Cinema Font could better handle fonts which had been loaded into Typesmith (AFCD No.3) and simply re-saved as a type 1 font. If you can't get hold of Image then try Pixel Pro. Now this was on an AF disk long before CD-ROMs were a twinkle in my eye. Another program that is good for font conversion is a PD proggy called Confont by Martin Hoffmann. You should be able to find this on Aminet.

By Roy Burton

a blank material, its name becomes highlighted. Now choose Render from the Material menu, after a few seconds you'll see a small sphere rendered in the material. To see all the materials rendered choose Materials/Render ALL, this could take a while if you have a number of materials.

Rendering

To render a scene click on the Render button with your left mouse button, you have a choice of renders modes that start at once.

There are 6 render modes from Monochrome-Wireframe to Raytracing each becoming progressively more detailed and thus taking longer to complete.

If you select a render mode with your right mouse button you get a number of rendering options/preferences for that mode.

Selecting a screenmode in the Screenmode section of the Render preferences will enable you to see the render progress, but the program can and will generate a 24bit IFF as default even if you only display a 16 colour screen mode. To change the size of the final picture in the General section of the render prefs (this is normally top most) change:-

Pict. seq - Choose This Picture

Resolution - select size or Manual if you want specific sizes that need to be put in the boxes to the Right. (You may need to restate the screenmode if the render fails with 'Screenmode not available').

Aspect Ratio - 4:3 or manual.

Back Issues

Issue 1*

- Piracy feature.
- ImageFX 3 review.
- CyberStorm PPC review.
- Genetic Species review.
- Photogenics text effect tutorial.

Issue 2*

- Graphics Cards Explained. Plus a guide to A1200 gfx card options.
- Round up of PPC enhanced software.
- Directory Opus
- Magellan II review.
- Interviews: Gary Peake & Fleecy Moss

- Workbench Cookbook: Get the most out of a 16 colour Workbench.

Issue 3

- Interview with Petro Tyschtschenko.
- Get Netted: Get your Amiga on the 'net and how to choose an ISP.
- Reviewed: NetConnect, IBrowse, AWeb, AmFTP and WebVision and more.

- EMailer round up.
- Candy Factory Pro - Review/Tutorial.
- Back to Basics: Beginners tutorial on the startup scripts.

Issue 4*

- CD-ROM Explained
- Amiga buy-out feature.
- Interview with Fleecy Moss.
- Reviewed: Photogenics 4, ImageFX 4, Olympus Camedia C1000L, IBrowse 2.1, TZer0, and many more.

- Back to Basics: DOSDrivers tutorial.
- Using Layers in ImageFX 3+ and Photogenics 4.

To Order

Please list the back issues you require and send a cheque or postal order for £2.50 per issue to:

Clubbed, 26 Wincoat Drive, Benfleet, Essex, SS7 5AH.

* We only have limited stock of this issue please telephone (01268 569937) to confirm availability.

Keep Up-to-Date with the clubbed-announce Mailing List

Clubbed now has its own Internet mailing list to keep connected readers better informed about the magazine. The mailing list called clubbed-announce is hosted by the OneList service.

We will post a minimum of one update on the list per month but your mail box will not be flooded because this list can only be posted to by the editor.

How To Join

Subscribing to the list is free, just send a blank EMail to:

clubbed-announce-subscribe@onelist.com

Or go to the list page on the OneList website, if you subscribe on the website you will need to register (if you haven't already for another list):

www.onelist.com/community/clubbed-announce (all one line)

We hope the list will keep you better informed about Clubbed and encourage you to join.

Join SEAL

If you live in or around Essex why not come along to a SEAL meeting? We're a lively group who meet every other Friday evening at Northlands Park Community Centre in Basildon. We offer help, advice and demonstrations at meetings and someone is always available to lend a helping hand in between.

If you decide to join membership costs £2.50 per month (or £25 if you pay yearly) and includes access to all meetings, refreshments and 4 issues of Clubbed a year.

For more information and directions to the venue:

Visit <http://www.seal-amiga.co.uk>

Telephone Mick Sutton on (01268) 761429 (7 to 9pm)

Write To Mick Sutton
20 Roding Way
Wickford
Essex
SS12 9BB

EMail seal@seal-amiga.co.uk

Next Issue

What's coming your way in issue 6 of Clubbed?

Features

Acceleration!:

After our Graphics Cards feature in issue two we look at the other vital addition for any Amiga system, a processor accelerator. This feature will cover all the types of accelerator available including the current and forthcoming PPC cards. We look at software compatibility and which extra features and add-on modules you might want to look out for.

Reviews

- Yamaha 8424 CD Writer.
- Netconnect 3 including the latest versions of Voyager and Metalweb.
- Scan-doubler and SVGA monitor round-up.

If they arrive in time we hope to have reviews of:

- Heretic II
- ArtEffect 4
- Amiga Writer 2

Support

Word Publishing Tutorial:

We guide you through creating an impressive poster combining text and graphics in the Final Writer.

Back to Basics - Workbench:

Concentrating on the new OS3.5 Workbench we uncover many useful tips and tricks which make it much easier and quicker to use.

Hard Drivin':

The second part of this tutorial will explain how to get the best performance out of your existing hard drives. We will also cover how alternative file systems and faster controllers can speed up disk operations.

Plus all the latest news and more...

**Clubbed Issue 6
is planned for
August 2000**

NOTE: This is a provisional contents list and subject to change without notice.

Cinema 4D for Beginners

CUCD 27

If you have problems installing from the cover CD an updated installer is still available from the CU Amiga WEB site:

<http://www.cu-amiga.co.uk>

On starting the program for the first time you will be asked for various details and a serial number which is supplied with the commercial software. The serial number for the CUCD 27 version should have been printed in the magazine but unfortunately they were omitted. For some time Hisoft would supply the serial number but they have now stopped this service so there is no legal way to obtain it.

Screenmodes

On entering the information the program starts and its default screen is Workbench. Now C4D needs at least a 256 colour screen so if you run workbench in less colours you need to tell it to open its own 256 colour screen preferably at least 640 by 512, to do this we go to Project/Settings/Editor Preferences menu item then click Screenmode and highlight the screen you want to use, e.g. PAL:High Res Laced at 256 colours then press OK button. (Important if you only have Workbench in the list then you need to add the PAL monitor to your DEVS/MONITORS drawer in your System (or the appropriate driver)).

Now press the save button in the Editor preferences, the screen mode should now change.

Useful Windows

Now to see whatever going on and to access tools via buttons we need to open some windows. Go to Window menu and open the Object Bar, Texture Bar, Point Bar and Material Manager.

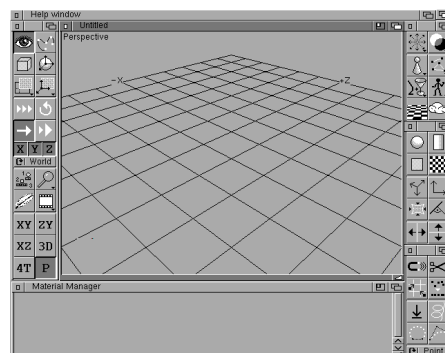
Please note all these are available via the Pull Down Menus, but the button bars are an easy reference while you learn about the Program. Now you have lots of windows over the screen so we need to do some tidying by moving and re-sizing some of the windows.

Below is a Picture of my favourite lay out.

Once you're happy with the layout choose Save Layout Prefs from the Project/Settings menu and click OK, the layout is saved.

Materials

If you load a project and your materials seem to be blank you can see them by rendering them. With your mouse pointer click once on



Games Revolution

Now Showing



Coming Soon



fxPaint

This example image includes several fxPaint effects including the Pyro plug-in on the right and the Supernova effect on the left. The fractal (created in fxPaint) was rubbed through using the anti-aliased text as an alpha channel. Finally the Button Border effect was used to get the raised edge.

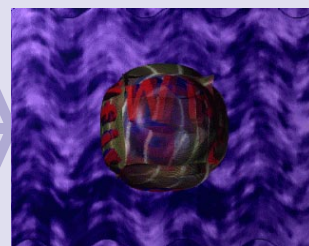
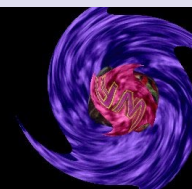
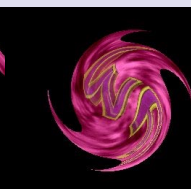
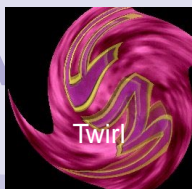
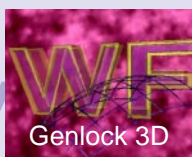


Cinema 4D



The end result of Robert Tiffen's Cinema 4D tutorial which starts on page 34.

Wildfire 7 PPC



Wildfire's powerful effects can be used to create stunning animated transitions between images....

...Three of the many example transitions are shown here applied to the same base images.